THE

PALESTINE EXPLORATION FUND.

NOTES AND NEWS.

The following Resolution of the Executive Committee, passed July 3, 1877, has been ordered to be communicated by means of the *Quarterly Statement* of July to all subscribers :—"That considering the heavy expenses of the Survey now in progress, which must be met during the next three months, the Committee beg that every subscriber who has not yet paid his subscription for the current year will kindly send it in at once, either to the Head Office or to the Hon. Sec. of his town, although it may not fall due till the last quarter ; that intending donors will bear in mind the urgent importance of finishing the Survey at once ; and that Honorary Secretaries be asked to forward the subscriptions paid to them as soon as they may be conveniently collected."

The progress of the Survey is detailed at fortnightly intervals in the "Journal" extracted from Lieut. Kitchener's letters. In starting the work he received the greatest assistance from Consul-General Eldridge ; got letters from the new Wali of Syria and from Abd-el-Kader ; was welcomed at Safed, the scene of the late attack ; and has proceeded undisturbed with his triangulation. Up to the latest account the total amount surveyed was 550 square miles, leaving about an equal amount to complete the Survey of Northern Palestine.

If things remain tranquil, Lieut. Kitchener will have finished Northern Palestine by the middle of August. He will then probably move southwards, in order to settle various points of difficulty which have arisen in laying down the map. This done, there will remain only a small area of 200 miles at the extreme south, where two tribes have been carrying on war against each other for the last three years.

In order to assist in promoting a friendly feeling towards the party, the Committee have resolved on giving up their claim to the rest of the fine imposed on the Safed people. They have addressed a letter, which is now under consideration, to the Foreign Office, asking for the re-establishment of the Haiffa consulate.

☞ The actual depression of the Sea of Galilee has been ascertained to be 682·554. This result may be slightly modified on re-examination. The papers are in the

hands of Major Wilson, and will be read at the next meeting of the British Association.

From the camp of Tiberias five extinct volcanoes were observed from which the basalt has been thrown out over the surrounding country: the plains being covered by the ashes and boulders of basalt are rendered extremely fertile. Two miles south of the Kurn Hattin occur two extinct volcanoes, and Lieut. Kitchener is of opinion that the Kurn Hattin is another.

The drawing of Jacob's Well as it now appears, which is our frontispiece to the present number, has been drawn and presented to the Committee by Mr. H. A. Harper from a sketch taken by himself on his last visit to the Holy Land.

The Rev. Selah Merrill, Archæologist of the American Association, passed through London last month on his way to New York. He was received by the Committee, to whom he showed his route map and explained some of his discoveries and theories. These will shortly be published by the American Committee.

Lieut. Conder is still occupied upon the Memoirs; part of his work, with his own conclusions, is published in this *Statement*.

An office has been taken at the Royal Albert Hall, where the work of map-drawing can be at once proceeded with. The services of two non-commissioned officers have been granted by the War Office, who will work under the superintendence of Lieut. Conder.

The Committee have to thank Captain Hamilton, R.E., for the two sketches which are published to illustrate Lieut. Kitchener's report. They were taken on the spot while Captain Hamilton was with the Survey party.

A complete set of the American photographs, one hundred in number, has been presented to the London Committee. They are large and handsomely mounted. About fifty of them are views of places never before taken. Among them are photographs of Um el Jemeil, Lake Phiala, Bozrah, Salchad, &c. There are also views of Canon Tristram's discovery, the Ruins of Mashita. These photographs are lying at the office in 9, Pall Mall East, where they may be seen by any visitor.

The new Statement (the fourth) of the American Society is also ready. Extracts from this will be given in the October *Quarterly Statement*.

The following is the financial position of the Fund (June 30th). Receipts, March 29th to June 30th, £936 3s. 8d. Expenditure: Exploration, £673 1s. 9d.; office and management, £185 5s. 11d. The balance in the banks on the latter day was £398 0s. 4d. We asked in April for £2,000 between then and September 30th. At present we have received less than £1000. We now ask for £1000 in the present quarter, or rather in the present month, before the summer holidays begin.

Attention is called to the statement advertised on the cover, that subscribers to the Fund are privileged by the publisher to receive both the "Literary Remains of the late Mr. C. F. Tyrwhitt Drake," and the "Underground Jerusalem" of Captain Warren, at reduced rates. The former book will be sent for ten shillings, the latter for sixteen shillings, postage paid. But letters asking for them must be sent to the office at 9, Pall Mall East only.

Oxford subscribers will make a note that an account
Old Bank by Canon Ridgway for the receipt of subscriptions and donations.

An Association for the Exploration of Palestine has been formed in Germany. The prospectus is signed by Dr. Zimmermann, and Professors Socin, of Tübingen, and Kautzsch, of Basel. Among the committee are Count von Moltke, Karl Baedeker, Dr. Kiepert, the German Consul of Jerusalem, Dr. Sandreczki, and Herr Schick. A long list of those who have promised support includes the names of Professors Ebers, Schlottmann, Sepp, and Sprenger, Herr Weser, and other well-known men. The society will publish a "Quarterly Journal of Palestine Research," which, like our *Quarterly Statement*, will be issued free to all its subscribers. It will contain papers on Topography, Natural History, Ethnology, including Folk-lore, Statistics, Political History, Coins and Inscriptions, and General Literary News. The yearly subscriptions will in the first instance be devoted to this magazine, and if the revenue of the society exceed the cost of the periodical, a fund will be formed for the issue of scientific works on the subject.

Several cases were discovered in 1876 of postage stamps being lost on their way to the office. The only way to avoid such loss is to send money by P.O.O. or by cheque, *in every case payable to the order of Walter Besant, and crossed to Coutts and Co., or the Union Bank, Charing Cross Branch.*

The ninth thousand of "Our Work in Palestine" is now ready (price 3s. 6d.), and may be ordered of booksellers. This book carries the work down to the commencement of the Survey, but does not embrace M. Ganneau's discoveries nor the results of the Survey itself.

The following are at present Representatives and Lecturers of the Society, in addition to the Hon. Secs. :—

Archdeaconry of Hereford : Rev. J. S. Stooke-Vaughan, Wellington Heath Vicarage, Ledbury.

City and neighbourhood of Manchester : Rev. W. F. Birch, St. Saviour's Rectory.

London : Rev. Henry Geary, 16, Somerset Street, Portman Square.

Norwich : Rev. F. C. Long, Stow-upland, Stowmarket.

Peterborough : Rev. A. F. Foster, Farndish Rectory, Wellingborough.

Worcester : Rev. F. W. Holland, Evesham (Member of General and Executive Committee, and one of the Hon. Secretaries to the Fund).

Diocese of Ripon : Rev. T. C. Henley, Kirkby Malham Vicarage.

Ireland.—Diocese of Armagh : Rev. J. H. Townsend.

Rev. G. J. Stokes, Blackrock, Dublin.

Scotland.—Rev. R. J. Craig, Dalgetty, Burntisland.

While desiring to give every publicity to proposed identifications by officers of the Fund, the Committee beg it to be distinctly understood that they leave such proposals to be discussed on their own merits, and that by publishing them in the *Quarterly Statement* the Committee do not sanction or adopt them.

Annual subscribers are earnestly requested to forward their subscriptions for the current year when due, at their *earliest convenience*, and without waiting for application.

The Committee are always glad to receive old numbers of the *Quarterly Statement*, especially those which are advertised as out of print.

Ladies desirous of joining the Ladies' Associations are requested to communicate with Mrs. Finn, The Elms, Brook Green, London, W. The full report of meetings held by Mrs. Finn during the last quarter will be found in the business sheet.

Cases for binding the *Quarterly Statement* are now ready, and can be had on application to Messrs. R. Bentley and Son, 8, New Burlington Street. They are in green or brown cloth, with the stamp of the Society, uniform in appearance with "Our Work in Palestine," and are sold at the price of eighteen pence.

Lieut. Kitchener's Guinea Book of Biblical Photographs can be bought at Mr. Stanford's establishment, 55, Charing Cross. It contains twelve views, with a short account of each. They are mounted on tinted boards, and handsomely bound.

JOURNAL OF THE SURVEY.

THE following extracts from Lieut. Kitchener's letters give a rough current history of the progress of the party from Lieut. Kitchener's arrival in Palestine :—

"*Beyrout*, Feb. 6, 1877.—You will be glad to find that the country is not in so bad a condition as you think. I have seen Consul Eldridge to-day, and he thinks there is no reason against my taking the field. The Moslems are quiet, and the Government has a strong wish to put down any rising or disturbance, and is keeping the people in capital order."

"*Damascus*, Feb. 14, 1877.—The new Wali of Syria arrived at Beyrout on the 8th, and next day Eldridge very kindly took me with him when he was making his official visit. Of course no business could be done. Next day the Wali returned Eldridge's call, and I saw him again and showed him some of our work. Both times Eldridge spoke very highly of it, and the Wali agreed that it was of great importance. I came here the next day with Jago in order to collect the servants and horses. Eldridge said if possible he would get the letters I want from the Wali. He has written to say that I had better wait for him here, as he cannot do business out of his government. . . . Since I have been here I have seen Abd-el-Kader, who was very civil indeed. We spoke of the Safed affair, and he expressed his deep sorrow that his followers should have behaved so badly. I asked him for a letter to his people in the country, which he promised me."

"*Beyrout*, Feb. 29, 1877.—The men have arrived here safely. They were not able to land at Haiffa owing to bad weather. All the luggage is safe. The new Wali has not yet gone to Damascus, and Eldridge has written officially asking for an answer about my letters. I have no doubt I shall receive them in a day or two. I got letters from Abd-el-Kader to his people at Tiberias and Safed, so that I shall have no difficulty in that part of the country from our old assailants. The delays of this country are most annoying. Eldridge recommends my waiting still for the Wali's letters. . . . My time has been fully taken up bargaining for horses and getting the party together. I intend sending Corporal Brophy with the heavy luggage down to Haiffa on Friday morning, the 23rd, by steamer. I dare not risk being carried on to Port Saïd myself, so with Sergeant Malings, Corporal Sutherland, and all the necessaries for finishing the levelling, I mean to ride down the coast, starting from here on Saturday morning. I think this is the best way, though it is rather difficult, owing to all our loose things being at Haiffa. I hope to be at Haiffa on Monday, and to start work on Tuesday, the 27th. The rains are very late this year, so it is perhaps as well that we have not been in tents up to now. On last Saturday there was a tremendous storm all along the coast. The authorities have all been very polite, and I have on every occasion found the scientific posi-

tion of the Society much thought of. I have seen a great many Pashas and officials. Nothing could be kinder than Mr. Eldridge and Mr. Jago, who have greatly helped me since I have been here. I am sure you will understand how anxious I am to begin work, and that it is only a series of insurmountable delays that keeps me here. However, you may be sure that work will be started on the 27th, unless something new turns up."

"*P. E. Fund Camp, Haiffa*, March 6, 1877.—You will see by my report how we have been getting on, and I hope you will be satisfied. . . . Next time I shall have a more attractive country to describe. All is going quietly; the country is quiet, and I hope to do well. Colonel Fremantle, of the Coldstreams, is now with me for a short visit."

"*Tiberias*, March 30, 1877.—We are getting on all right with the work, and I hope in another fortnight to have finished the shores of the Sea of Galilee, and be on the road to Safed again. My servants rather dread going back, so I shall have to keep a look-out on the rearguard as well as in front going up the hill. Eldridge has gone to a good deal of trouble to make things go well. . . . If the Fund could get a consul established at Haiffa it would be a very good thing. If I am well received at Safed and report satisfactorily, would the Committee give up their claim to the rest of the fine imposed? It would smooth matters. . . . The Druses are giving a good deal of trouble, cutting people's throats on the road to Damascus. Also there is a report of war between the Druses and Arabs in the Jebel Druse, and Mohammed Said Pasha is to be sent with a large force to put it down. This is merely an *on dit*, and not very reliable. In the south, near Hebron, the Arab tribes Tarabin and Teyyaha have had a fight. The latter lost 101 men killed, the former only 12. This *is* reliable. Consul Moore has telegraphed and sent out people to stop all travellers from going that way. It is lucky I am doing the north after all."

"*Safed*, April 11, 1877.—You will be glad to hear that we have made a most successful entry into Safed. The Governor, Kadi, and H.B.M. Consular Agent, with twenty-two followers, came out about an hour and a half on the road to meet me. We rode into the town in quite a triumphal procession. I at once went to the Serail and was saluted by the guard. After coffee with the Governor, I pitched camp, and then the Governor came and called. After him the British Agent, and then the Kadi, with all the members of the Mejlis. Nothing could be more civil and obliging than everybody was. To-day I have had the Governor, the British Consul, and our old enemy Ali Agha Alan, the cause of the row; the latter expressed deep sorrow for what he had done, as well he may, as I hear he and the Mogrebbins are all but ruined. I called on the Consul and the Kadi and measured up the castle. . . . On Monday I shall move to Meiron, where we shall have rather a long camp, working up to date and carrying the triangulation north. Of course without Sergeant Armstrong I shall not get done so soon as I said in my estimate, though I do not think we shall be much behind time. . . . Captain

Hamilton, R.E., who has been staying with me, takes this. He will be in town on May 5th, and will give you all the latest news."

"*Meiron*, April 17, 1877.—Yesterday I left Safed for this place, having had a most successful camp there. Everybody was very polite. The Governor came here yesterday, and has impressed upon the people the necessity of doing all we want. In the evening he dined with me. H.M.S. *Torch* has been at Akka. I was informed by a telegram from Eldridge when he would come, and was thus able to make considerable impression on the minds of the natives. I do not know what to think about war or peace, I get such contradictory telegrams, but I suppose every one is in the same case. In case of war breaking out, I hope to finish up to Banias before marching to the coast; but it is a very difficult thing to see what effect it would have on the country. I might be able to go on without interruption, or I might have to march to Beyrout and wait a little."

"*Meiron*, April 25, 1877.—I may not be able to send a report per next post—*i.e.*, the one this will go by—as I shall be on the move north. We have been getting on very well, and I have found two new synagogues and four dolmens. They are small, but very distinct, and two have names. I have been obliged, on account of the triangulation, to modify my plan of moving direct on Banias, and shall go to Dibl, or near there, and thence to Kedesh, and so on to Banias. I hear on all sides that war has been declared, but have not yet received any telegram to that effect from Eldridge. I shall continue the work until I see a good cause for shutting up, and then shall probably move to Beyrout and wait. I see no reason as yet why I should not finish the north, but of course any day may change this view of the matter. I am in constant correspondence with Eldridge, who is most kind, and sends me all the news. I wish you could get the matter of the consuls in North Palestine looked into by the Foreign Office, as it is really wanted. An Englishman at Haiffa or Akka, and an advance to some of the consular agents, such as at Safed, who have neither seals of office nor any status in the country, though French, Austrians, and others have, is much wanted. When we have finished this camp, in four days we shall have surveyed 400 square miles, judged roughly. It is very close country just about here, full of names, and takes time.

"I shall send you a report next mail on the Sea of Galilee. We have been kept in camp two days here by wet weather."

"*Dibl*, May 4.—Yesterday I saw our northern boundary and took trigonometrical shots into what will be our most northern station. Our triangulation has been very satisfactory, 17ft. difference in check lines of from 10 to 12 miles. . . . . Health of party has been exceptionally good."

"*Dibl*, May 13.—Correction for the Tiberias Report. The aqueduct above Ain et Tineh is 52 feet instead of 57, which makes it and the top of the reservoir nearly on a level. The reservoir was levelled down to the sea, and the aqueduct computed by the theodolite. . . . I have very little additional news to tell you. We have surveyed 430 square miles

and found a good many inscriptions and the remains of one fine early church. The country is full of villages. I move to Kadesh the day after to-morrow, and shall probably be at Banias before you get this."

"*Taiyebeh*, May 25, 1877.—Since the declaration of war I have pushed on the work as fast as possible, and even before that, for many reasons. I had no time for any excavations such as at Khan Minyeh and some other places. We are now at the northern boundary of our work, and I hope to finish in the estimated time, but this will depend on the nature of the ground near the coast, which I am afraid is rather difficult. We may be a week or two later on this account. The total surveyed is now 550 square miles, and the triangulation is already finished from this camp.

"I find the authorities in the country most active and obliging in helping the work as far as they can. I have had no serious difficulty with the natives. The health of the whole expedition has been excellent."

LIEUTENANT KITCHENER'S REPORTS.

II.

CAMP AT TIBERIAS, 30*th March*, 1877.

HAVING completed the Survey of the Akka Plain, and finished the levelling down to the Mediterranean, it was necessary to carry the eastern portion of the Survey north, from a line about two miles south of Tabor, and to run the line of levels down to the Sea of Tiberias.

Camp was struck at Haiffa on the 8th of March, and after passing one night at Nazareth we arrived at Hattin, an important village on the road from Nazareth to Tiberias, seven miles from the latter, and well situated for the work we had to complete.

The triangulation was started next day by taking a series of observations from Jebel Toran. Our old trigonometrical stations were satisfactorily picked up, new cairns being erected at all the stations, and the triangulation well advanced. This work occupied us nine days. The detail was then started, and has been worked in for 100 square miles, reaching as far north as the village of Yakuk. The levelling was also begun at the same time. The difficulty of running the levels to the Sea of Galilee was considerable, owing to the steep inclines and the narrow and precipitous gorge of the Wâdy Hamam, down which it had to be carried. The result, however, is very satisfactory. In the 16¼ miles levelled, the difference between the results obtained with the two instruments used is ·215 of a foot. Adopting the ten-inch level readings throughout, and considering the theodolite readings merely as a check on the more accurate instrument, we arrive at a depression for the Sea Galilee of 682·554 feet. Thirty-five bench marks have been cut on the line of levels and fixed on our map.

In this portion of the Survey we have mapped five extinct volcanoes from which the basalt has been thrown out over the surrounding country; and the plains, being covered by the ashes and boulders of basalt, are rendered extremely fertile. Other smaller outbreaks have also been noted. Two miles south of the Kurn Hattin occur two extinct volcanoes, one of which is called the Kal'at es Sandâ, or "The Basalt Castle;" in both the black basalt rock is seen thrown up, forming a crater in the centre. The Kurn itself is, in my opinion, another; the basalt does not show itself so much, but the rocks forming the crater bear signs of the eruptions that took place, and the plains around are strewed with basalt rocks and *débris*. North-eastward of the latter are two more large outbreaks overhanging the Plain of Genesareth, one of which is called el Waret es Sandâ, "The Rocky Plain of Basalt."

Immediately above our camp at Hattin was the field of the last great fight of the Crusaders. The Kurn rises about 100 feet in rocky ridges above the plain on the south-west, whilst on the north and east there is a very steep descent of 800 feet to another plain, the Sahel Hattin, which again terminates abruptly over the Sea of Galilee. The Kurn Hattin, or "Horns of Hattin," was the last place held by the king and his brave knights when surrounded by the forces of Saladin. The rocky top seems a very natural fortress, and well adapted to be defended against far superior numbers. The Crusaders were, however, worn out by their long marches and hard fighting, and after driving back the stormers three times the place was carried, the king surrendered with the remnant of his forces, and the Christian kingdom in Palestine ceased to exist. The name of the plain south-east of the Kurn is "'Ard el Bŭrnus." Bŭrnus is the Arabic form of "Prince." In a history of Palestine by el Kadi Mujîr ed Dîn, 1585 A.D., Count Renaud de Châtillon, Lord of Kerak, who was the cause of the war, is always called el Bŭrnus Irbât, or el Bŭrnus, Emir of Kerak. The story is told of the King of Jerusalem when in Saladin's tent passing water to "el Bŭrnus" after the fight, which the Sultan does not admit as an act of hospitality to "el Bŭrnus;" afterwards the Sultan offers him his life if he will change his religion for that of Islam; but on the "Emir of Kerak" refusing to do so, he was slain by Saladin himself. No one else in the book receives the title of el Bŭrnus; we have therefore an historical name remaining attached to the site of the battle.

On the Southern Horn of the Kurn are the foundations of an ancient square tower and some small cisterns; the former was probably a watch-tower on the great road to Damascus. A copious spring of water flows out of the north-west base of the Kurn, where a short wâdy breaks down from the plain above. In this wâdy, immediately above the 'ain, is the Kubbeh of Neby Shu'aeb (Prophet Jethro) still existing. Robinson, in Bib. Res. p. 239, in a footnote, mentions that, according to Boha ed Dîn, the Kubbeh stood upon the Tell in his day—*i.e.*, at the close of the twelfth century (Vita Salad. p. 69). The same is

mentioned in the Jewish Itinerary in Hottinger's Cippi Hebraici, p. 74, ed. 2. Quaresmius supposes the remains on the top of the Kurn to be those of a chapel (ii. p. 856).

The top of the Kurn is called Medinet el Aikeh, perhaps from the large number of loose stones which resemble the ruins of an important place.

At the mouth of the gorge of the Wâdy Hamam on the southern side occur the ruins of Irbid, the ancient Arbela, in which there is a very good specimen of a ruined synagogue, which has been measured and described by Major Wilson, R.E. (*Quarterly Statement*, No. 2, p. 40). Two columns and one doorpost remain standing *in situ*; the lower part of the other doorpost also remains. They are all monolithic blocks of limestone. Among the ruins lie several fine capitals of different sizes and styles; black basalt and white limestone seem to have been mixed both inside and out; some of the capitals being of the latter material. The ground on which the synagogue stands slopes towards the north, the southern portion being cut away to receive it. In the centre of the southern wall is a mihrab or apse 6ft. 4in. in diameter and 4ft. 2in. deep. Among the ruins are several blocks of cut stone with semi-attached columns 9in. in diameter with Ionic capitals; these seem to have been portions of the exterior decorations. On one block were two semi-attached fluted columns 6in. in diameter, one with straight and the other with twisted flutings. Lying to the north of the synagogue there is a cut stone which appears to have been the top of a niche; it measures 5ft. long, 2ft. 8in. high, by 1ft. 8in. thick. In the centre of the length is a circular niche 2ft. 4in. in diameter, cut 10in. into the depth, with lines radiating from the centre. A moulding 3in. wide and raised 2in. above the face of the stone runs rounds the niche; enclosing this is a triangular moulding, its apex being above the centre of the niche at the top of the stone, and its two ends at the lower extremities of the stone. It is raised 4in. above the face of the block on the outside, and is 4in. wide; three slight mouldings are carried along it, and on the inside it is flush with the face of the stone; the bottom line of mouldings end at the moulding round the niche. Special plans and drawings have been taken of the building and details.

In the precipitous rocks of the Wâdy Hamam, east of Irbid, are situated the celebrated caves from whence Herod the Great dislodged the robbers by attacking them from above. Both sides of the wâdy are honeycombed by caves, but the principal ones, called Kal'at Ibn Ma'an, are situated on the southern side, where the cliffs are upwards of 1,000 feet above the bed of the wâdy. A steep slope on the *débris* fallen into the valley leads up about 600 feet to the foot of cliffs, which then rise perpendicularly, and in some cases have crumbled away below till they are overhanging. The castle is situated opposite where the Wâdy Muhammed el Khalaf breaks into the valley, and immediately below is a fine spring, 'Ain es Serâr. The traces of well-made basalt stairs lead up to the foot of the castle. The entrance was flanked by small round

towers, besides loopholed galleries on the face of the rock. The castle consisted of natural and artificial caves in several tiers, walled in on the outside and connected by galleries and staircases along the face of the rock. The walls were built with great care and finely dressed; they are of crystalline limestone and black basalt in rows; they are loopholed. All the arches are pointed, and the building appears to be very good Arabic work of probably the fifteenth century, when also well-built khans were constructed on the road from Damascus, such as Khan et Jujjar, near Mount Tabor.

Inserted in the lower wall is a large block of limestone bearing two lions facing each other, one front paw of each being placed on some indistinguishable object. It appears to me extremely probable that this stone, quite distinct from those around it in material and workmanship, was brought from the ruined synagogue at Irbid. It also greatly resembles the stone bearing two lions at the synagogue at Umm el Amud. Should it have been brought from Irbid, it would appear that both synagogues had similar lintels ornamented with lions. The first cave entered is a large natural cavern, which probably served as a stable for the horses of the garrison; from this a staircase leads up to smaller caves opening from a gallery along the face of the rock; stairs led up from either end of this gallery to similar caves in different tiers. Some are now quite inaccessible from below. The place is inhabited by immense flocks of pigeons, from which the valley takes its name, and a great number of vultures and eagles. Water was brought from Irbid by an aqueduct running along the face of the cliff above the castle, and then fell vertically into cisterns in the building. At one place the water was conducted through an earthenware pipe.

This fortress, rendered almost impregnable by nature and art, might afford accommodation for six hundred or seven hundred men, and commands the main highway from Damascus to Western Palestine, which leads up the Wâdy Hamam.

The ruins on Mount Tabor were also visited from this camp. They consist of a large *enceinte* defended by numerous towers built of drafted masonry and surrounded by a large rock-cut ditch. These works appear to date from the time of the Crusaders, and to have been built of the old materials of previous fortifications. The remains of three churches have been uncovered in the recent excavations by the Latins, besides numerous foundations. It is proposed to pay a further visit to this interesting place, and a fuller description will be given in a subsequent report.

The country is now very lovely, carpeted with flowers and green with the growing crops. The people complain of being short-handed owing to the large numbers that have been taken away for military service. The second ban and some of the third ban of redifs have been called out, and the people fear lest the Muharfez or Landwehr may be required. Old men and women have to take their places in the fields, and when the harvest time comes it will be very difficult to gather in the crops.

Owing to the good offices of Mr. Eldridge, H.B.M.'s Consul-General

at Beyrout, and the willing assistance rendered to me by the Mutteserif of Akka, I have not had the slightest difficulty in the prosecution of the work; still it would be an immense advantage to this part of the country if the British Consulate at Haiffa were re-established.

The influence of an Englishman at this port would be of the greatest benefit to all the Christians of the district, which contains a thriving English mission and schools at Nazareth, many English subjects among the Jews of Tiberias and Safed, besides a considerable amount of English shipping trade from Akka.

III.

MEIRON, *April* 30, 1877.

THE work of this month includes the survey of the shores of the Sea of Galilee, where a great many points of interest occur.

The scenery of the lake is hardly what would be expected of a basin 685 feet below the sea level. The hills on the eastern side have an almost perfectly level outline, scarcely broken by any valley of importance, and decidedly monotonous in appearance; still the bright sunshine throws a rosy haze over the country, and the contrast with the bright blue water is very beautiful.

The best views of the lake are from a distance on the many heights from which it is visible, as thus seen in the evening it is particularly lovely. Deep blue shadows seem to increase the size of the hills, and there is always a rosy flush in the sky and over snow-clad Hermon.

The road at the southern end of the lake passes through Kerak, which appears to have been a fortified place of considerable strength. Two castles, one on either side of the road, with a wall joining them, seem to have guarded this entrance to the shores of the lake. On the west a spur runs down from the hills ending steeply close to the road—on this the western castle was placed. On the east there is a large partially artificial plateau which extends from the road to the exit of the Jordan; a broad water ditch from the Jordan and the river itself defends two sides, while the third is on the shore of the sea, thus leaving only a narrow entrance on the west from which it might be attacked. The remains of both castles are very slight, as the place has been ploughed up. There are ruins of modern dwellings on the north-west corner of the plateau, where probably the principal citadel stood, and traces of a wall round the plateau and joining the two castles. The only remains of the western castle are heaps of stones. The place must have been of great importance, as it closes the passage of the valley, and also that of the Jordan at its northern extremity, where it is now crossed by a ferry. It also must have required a large garrison owing to the great size of the plateau.

Josephus describes Vespasian as advancing to the attack of Tiberias from Scythopolis or Beisan: "He then came with three legions and

Drawn by T. Villiers Lister Esq.

From a Sketch by Capt. A.C. Hamilton, R.E.

AIN EL MUDAUWARAH.

pitched his camp thirty furlongs off Tiberias, at a certain station easily seen; it is named Sennabris."

Measuring 30 furlongs north from Kerak it brings us well within the ruins of the ancient town of Tiberias, though not up to the walls of the present city.

I think it is possible that the large artificially levelled plateau, surrounded by traces of a wall on the east of the road, may be the remains of that camp of the Roman army here described, and that this was the station on the road named Sennabris. $1\frac{1}{4}$ miles north of Kerak, and $\frac{3}{4}$ of a mile west of the road, is Khurbet Kadesh; below it runs the aqueduct which brought water from Wâdy el Fajjâs to Tiberias.

The next place of interest is the hot springs, with their baths, much frequented by the Jews of Tiberias. The three principal springs had a temperature of 132, 143, and 144 degrees respectively, commencing with the southern one. Above the Hammam, or baths, is the tomb of Rabbi Mair Ramban, the celebrated Maimonides. Two schools are now built over his tomb, one for the Askenazim and the other for the Sephardim Jews.

A quarter of a mile farther north commence the ruins of the ancient town of Tiberias—they have been largely excavated for cut stone for modern buildings. A great number of fine granite columns are lying about, in one place as many as nine close together; there are also remains of the sea-wall, with towers, along the coast. These ruins are of considerable size, extending a mile south of the present town, and it seems probable that the latter is entirely or partially on a new site. Immediately behind the ruins the cliffs rise steeply, with traces of former fortifications on them.

Two miles north of the southern wall of the present Tiberias (which may be on the site of the northern wall of the ancient city), a spur runs down from the hills ending in a rounded hill, the eastern slope of which descends steeply to the water. On this top are ruins called Khurbet Kuneitrîyeh, consisting of heaps of cut stones, with foundations of walls. Near the seashore is a spring called 'Ain Fuliyeh; to the north is an open space where Wâdy Abu el 'Amis runs down to the sea, now occupied by some gardens; beyond are the high rocky hills called Burj Neiât, which again run down steeply to the seashore.

This must have been a very strong position on the road, and I think fulfils the requirements of Taricheæ, which was besieged after Tiberias by Vespasian, his camp being placed between the two towns (B. J. iii. x.).

The road north leads along the slope of the hills to el Mejdel, a small village with a few ruins, which has been identified with Magdala; it is situated on the southern extremity of the plain of Gennesaret or el Ghueir. The hills here fall back from the sea, leaving the plain, which extends $3\frac{1}{4}$ miles along the coast, and is $1\frac{1}{2}$ miles wide at its greatest part. Beyond the Wâdy Hamam the hills are topped with black basalt as far as Wâdy Amud, and there are two small outbreaks on the plain itself. The coast line is nearly straight, broken by small bays.

The land is extremely rich, but is now only partially cultivated by a few Bedawin and the people of Mejdel. It is wonderfully well watered, no less than five streams of water running to the sea through it, commencing from the south. First, the Wâdy Hamam brings down a good stream through a narrow precipitous gorge. The water is supplied from two springs, 'Ain es Serar, near which is Khurbet Ureidât, situated two miles from the sea in the gorge, and 'Ain Wâdy Hamam farther up.

The water is used for irrigation purposes directly it reaches the plain.

The second supply is from 'Ain el Mudauwereh (the round fountain), so named because it rises in a round basin formed by a low masonry wall 32 yards in diameter. The water in the basin is very clear, and there were numbers of coracinus and other fish swimming in it. The supply of water is rather less than half that of Wâdy Hamam.

The next stream is Wâdy Rabâdiyeh, the largest of any, descending through an open valley, and used to turn a number of mills. On reaching the plain it is at once diverted for irrigation purposes. The supply of water is about twice or three times that of Wâdy Hamam.

Immediately north of Wâdy Rabâdiyeh is Khurbet Abu Shusheh, situated on the slope of the hills, where there are no remains of importance to be seen; only a few basalt huts and some scattered stones, round a white wely called Sheikh Hassan Abu Shusheh.

The fourth supply of water comes from Wâdy Amûd, a winter torrent which, I was told, dries up in summer; it was probably on this account that water had to be brought by an aqueduct to fertilise this northern portion of the plain.

'Ain et Tineh is the most northern running water on the plain; it bubbles out by several heads under the rocks which close the north-east of the plain; it forms a clear stream of good water with many fish: slightly warm around it, there is most luxuriant vegetation and papyrus; it runs into the sea after forming several pools.

Besides those ruins at Mejdel and Abu Shusheh, the only remains found on the plain were those at Khurbet Minyeh, where there are extensive ruins, though nothing but remains of walls are now visible. I was informed * by two authorities that hewn stones and good walls existed below the present surface, and are excavated for building purposes; unfortunately, I had no time to test the truth of this assertion. The Khurbet is situated near the north-east extremity of the plain, and about 100 yards from the shore of the sea.

The Damascus road traverses the ruin, and a little farther on it passes the now ruined Khan Minyeh, which is still occupied by a few Arabs; it then passes up on the western slope of the steep hill which here ends the plain. On the top of this hill is an artificially levelled square plateau,

* Peasants were observed by Dr. Merrill digging at this spot in April, 1876, and unmasked a wall, at a depth of five or six feet, of fine squared stones in superior workmanship. See Fourth Statement, p. 67, American Exploration Society.

with traces of walls and buildings; there are also traces of steps leading up to it. It is called Khurbet 'Aurcimeh. Round the southern brow of this hill, where the rock runs steeply down to the lake, is the rock-cut aqueduct now used as a road, and described by Major Wilson. It is 52 ft. 4 in. above the sea, which is almost perpendicularly beneath it at one part, and has a fall of 7 feet in the mile; the water would not have been carried far on to the plain, but would have watered the gardens round Khurbet Minyeh. Half a mile farther along the coast is the pleasant bay of Tâbighah, where there are several small and one very large spring which turns several mills. The water is brackish. The 'Ain is enclosed by walls of masonry forming an octagon 25 feet side; by this means the water was raised to the required height, and carried by the aqueduct to the plain. Considerable remains of the masonry of the aqueduct leading to the rock-cut portion, and a small piece beyond, with the watercourse coated with thick cement, still remain.

The height of the top of the reservoir is 51 feet above the sea, thus it would require very little more to carry the water over the rock-cut portion of the aqueduct. I was informed by the people that this reservoir was built by Dhâher el'Amr, and it is now called Birket 'Aly edh Dhâher. It was probably repaired by him when building the mills around it; the lower portion appears to be older, and is built of better dressed stone coated with cement. The whole structure is of basalt.

The coast between Tâbighah and the Jordan is still indented with small bays; the country is entirely basalt, and slopes gradually down to the sea. The ruins at Tel-Hum, 1½ miles from Tâbighah, are along the water's edge, and are of considerable extent, and contain the fine synagogue excavated and measured by Major Wilson. A little beyond Tel-Hum are the ruins of a few basalt hovels called Khurbet Kerâsheh. At the mouth of the Jordan there is a small plain, in which are two small collections of huts without any traces of antiquity; they are called Khurbet Abu Zeiny and Khurbet esh Sheredjeh. There is a small lagoon at the mouth of the Jordan, and the ground in wet weather is deep.

The site of Capernaum is the most interesting of all the places round the lake. I cannot help thinking, with Dr. Robinson, that it was at Khurbet Minyeh. The guard-house, where the Centurion resided, was probably on the great Damascus road at Khurbet Minyeh, which seems to be the ruin of such a station.

Josephus describes the fountain called Capharnaum as watering the plain, and that some thought it to be a vein of the Nile, owing to its containing the fish called coracinus. This description applies to the 'Ain et Tâbighah, the water from which was brought in an aqueduct past Khurbet Minyeh to water the plain, and was named [illegible] after that place. The source is only ¼ of a mile away [illegible] mile from Tel-Hum, and all the water was carried [illegible] by the [illegible]

site direction, so that it could hardly be called after the latter place had it been Capharnaum. The coracinus was not observed in the 'Ain. The reservoir is nearly full of reeds, and the water is not clear, so that it is impossible to see the bottom where these fish occur; other fish were seen, and I was convinced there was no reason why the coracinus should not be there.

Our next camp was at Khân Jubb Yusuf, where we arrived on the 4th of April. The Khân is a large building falling into ruins on the main road to Damascus. There was no village near, the country being occupied by Bedawin of the Semakiyeh and Zenghariyeh tribes. To the east the country was entirely composed of broken basalt, while to the west all was limestone, much contorted, and forming north-west the Jebel Kauan range. From the camp we visited Khurbet Kerazeh, generally allowed to be the remains of Chorazin. The ruins are extensive, and contained a synagogue, measured and described by Major Wilson. The highly ornamented niches of this building, entirely cut in basalt, remain as sharp and clear as when new.

North-east of our camp we found the first perfect dolmen I have seen in the country; it is called Hajr ed Dûm, "the stone of blood." From the camp at Meiron we found four others. They are small, the covering stone measuring $11 \times 7 \times 1'' \cdot 6$, and no traces of signs on them were observed.

On the 10th, camp was moved to Safed, where previously we had some difficulty with the natives. By the kind offices of Mr. Eldridge, Consul-General for Syria, the Governor was warned of our coming, and prepared to give us a good reception. We were met half way by the Governor, the Consular Agent, and the Kadi, surrounded by a score of followers, and conducted to the town, where I was received with every civility.

Unfortunately, on the road the standard barometer got broken, and had to be replaced by our duplicate one from the store at Haiffa.

From this camp the ruined synagogue at Nebartein was visited. The principal remains are prostrate columns, and the fine lintel with Hebrew inscription. A squeeze and photographs were take of the latter. On the pedestal of a column there is an engraved hare. The occurrence of animals figured in these synagogues seems to be common. At Umm el Amud there are two lions; at Irbid there were probably the same. The stone is now in Kal'at Ibn Ma'an. At Nebartein a hare; at Kefr Bir'im, on two synagogues, lambs. At Sefsaf the remains of a synagogue were found by us; the lintel bears two sheep's heads. At el Jish, in a ruined synagogue discovered by us, an eagle resembling the top of a Roman standard, which seems to show that though the Jews objected to the Roman standards in the Holy City, they were put up in the country synagogues without trouble. I hope in my next month's report to give a fuller description of these very interesting buildings.

I also visited at Safed the Mukam Benât Yakub, where I was told the seven daughters of Jacob lay embalmed. The place is only a collection of caves walled up and made into a holy place. There are no mummies.

On the 18th, camp was moved to Meiron, a Jewish holy place. There are the remains of a fine synagogue and a great number of rock-cut tombs. One has sarcophagi for thirty-seven bodies, covered with stone lids; this is said to be the tomb of Rabbi Hillel and his thirty-six companions. The tombs of Rabbis Shamai and Hillel, and several other great Rabbis, occur here. Over the tomb of Rabbi Simeon Ben Jochai there is a large modern building, where the Jews come from all parts of Palestine on his *fête* day, the 30th April, to hold a sort of revel, lasting two or three days and nights. They dance and pray and light fires over the tomb. It is very extraordinary to see them in their long dressing-gowns and large hats dancing round in a circle.

The country to the north of this camp is thickly covered with villages Christian, Druse, Mahommedan, and Mettawaleh. Grapes are extensively cultivated, and a number of young trees have been planted, principally figs and olives.

El Jish, the ancient Giscala, is situated on the south slope of a hill three miles north of Meiron. It is a thriving village of approximately 300 Christians and 400 Mahommedans. On the top of the hill there is a small church, which is probably built nearly on the site of an old synagogue, the remains of which are strewed about and built into the walls of the church. Several large stone sarcophagi, with ornamental garlands and bands, have been turned up round the village. There are also a large number of cut stones scattered about, which probably composed the walls Josephus built round this place. On the western slope of the descent to Wâdy el Jish are the remains of another synagogue Three pedestals are *in situ*, and the doorposts, with traces of the walls A badly preserved square Hebrew inscription has been found on one of the pillars, and an eagle, resembling a Roman standard, on a detached stone. We also discovered the remains of a hitherto undescribed synagogue at Sefsaf. The lintel of one of the small doors is built in over the door of the mosque, and the niche, with ornamental voussoirs belonging to the principal entrance, are arranged above. A few portions of columns are all that remain above ground. From the highly ornamental character of the lintel of the side door, the principal lintel would probably be very fine if discovered. The two synagogues at Kefr Bir'im were also visited and planned from this camp. Close round Meiron, in the rocky hills, four dolmens have been discovered.

The amount of country surveyed up to the end of this month is 300 square miles.

On the 28th I received a telegram to the effect that war had been declared between Turkey and Russia. I hope this sad news will not interfere with the successful completion of the survey of Galilee.

H. H. KITCHENER, Lieut. R.E.,
Commanding Palestine Survey.

LITERARY REMAINS OF C. F. TYRWHITT DRAKE, WITH A MEMOIR.*

THE "Journal of the Palestine Exploration Fund" is the fittest place wherein to notice, however briefly, a work which gives an account, modestly but clearly written, of the comparatively uneventful life of one, whose various qualities and qualifications fitted him in a remarkable manner for the excellent work he accomplished during the two years and a half he was employed on the Survey of Palestine.

Born at Amersham in 1846, and educated at Rugby and Wellington College, Mr. Drake went to Cambridge in the hope of being able to carry out the solid student work for which he had already given good promise, especially as an accurate observer of subjects of natural history. But, though tall and otherwise robust in frame, Mr. Drake suffered from an incurable chest disease, which compelled him after a short stay at Cambridge, where he distinguished himself as a rifleman, to go for the winter (of 1866) to Morocco. Here, however, he was able to complete most successfully the ornithological studies for which he had shown so decided a taste while yet a schoolboy, and, in two visits he paid to this part of Africa (valuable as these were to him personally, that they gave him a practical insight into the habits and the language of Arab populations), to collect and bring home no less than 169 species of North African birds, many of them of considerable interest and variety. In 1868, he for the first time visited Egypt, and came to the natural conclusion that "the sphinx was rather a delusion," and, in 1869, commenced his exploration of the Holy Land; first, alone, in Sinai, and subsequently with Prof. E. H. Palmer in the Desert of the Tih—the University of Cambridge having given him a small grant to enable him to prosecute his researches there in natural history. The scientific results of this pedestrian expedition have been published in the *Quarterly Statements* of the Palestine Exploration Fund. About the same time, or rather on the conclusion of this tour, Mr. Drake had the good fortune to make the acquaintance of Captain and Mrs. Burton, some appreciative notices by each of whom, incorporated in this memoir, showing how highly he was esteemed by them, and being, at the same time, among the most interesting communications the editor has been allowed to embody in his narrative.

In company with Captain Burton, Mr. Drake made more than one journey of exploration, most of which are published in their joint volumes entitled "Unexplored Syria," the most important, probably, being that to Hamath, where he was able to obtain paper squeezes and photographs of the famous hieroglyphical inscriptions still remaining there. It is now generally admitted that the Rev. W. Wright made the first suggestion that these inscriptions were of Hittite origin. One

* R. Bentley and Son, 8, New Burlington Street. Price, *to subscribers only*, 10s., postage paid.

district of Upper Syria, that of *El Alah*, Mr. Drake examined alone, and found there many ruined cities abounding in Greek inscriptions.

In the autumn of 1871 Mr. Drake "volunteered" his services as naturalist, draughtsman, and linguist for the "Survey of Palestine," which were gladly accepted, and, going out early in 1872, became for some time, owing to the sudden illness of Captain Stewart, the head of the exploring party. Soon after, however, Lieutenant Conder took the chief command. From that time till his unfortunate death on June 23, 1874—that is for about two years and a half—Mr. Drake was of the greatest assistance on the "Survey." What he did has been for the most part admirably detailed in the letters from him, published from time to time in the *Quarterly Statement;* but in these he did not tell the world, what it is most important should be recorded—viz., how greatly the expedition was aided by his remarkable serenity of temper and invariable good humour, together with his singular skill in dealing with the native population. Of his letters the editor justly remarks, that the charm of them lies "in the quiet style, the earnestness, and the occasional strokes of humour" which characterise them and demonstrate "the unpretending thoroughness with which he went about his work. Always, whether he wrote, spoke, or worked, it was as the quiet typical English gentleman."

It will be readily believed that in a life so busy, as long as he had the power to make use of his abilities, and yet, withal, so short, Mr. Drake had but little time for writing either books or brilliant essays; besides, however, his letters, he left behind him several papers, more or less finished, which the editor of this memoir has very properly made public. They are as follows:—

1. "Modern Jerusalem" (printed separately as a pamphlet), pp. 51-113.

2. "Notes for the History of Jerusalem" (a plan for a larger and more comprehensive work), pp. 115-147.

3. "Notes for Travellers in Palestine," pp. 149-178.

4. "Morocco and the Moors," pp. 179-211.

5. "Notes on the Birds of Tangier and Eastern Morocco," pp. 213-236.

6. "Reports on the Natural History of the Tih," pp. 237-277.

7. "Extracts from Journal in Egypt," pp. 279-305.

We recommend this record of a life, short, indeed, but rich in work, to those who followed Charles Tyrwhitt Drake's too brief career in the Holy Land.

THE HOLY SEPULCHRE.

II.—Tomb of Joseph of Arimathæa.

In an extremely interesting paper in the last *Quarterly Statement*, M. Ganneau has drawn attention to the tomb-chamber (Fig. 1) in the Church of the Holy Sepulchre, known as that of Joseph and Nicodemus, and has given his reasons for believing that there is a second and somewhat similar tomb-chamber at a lower level. There is nothing improbable in this suggestion, though I think it rather hazardous, as the facts upon which M. Ganneau bases his argument might be explained in another way. My object, however, is not to criticise M. Ganneau's paper, but to give a

Fig. 1.

few additional details which came under my own observation whilst employed upon the Ordnance Survey of Jerusalem in 1864-5.

The first is that, contrary to the usual custom at Jerusalem, the tomb-chamber is excavated in the hard (*missa*) and not in the soft (*malaki*) strata of limestone; the second is that the beds or floors of the *kokim* slope downward from the mouth, the general rule being to cut them horizontal. M. Ganneau mentions a door, E (Fig. 2), on the right of the chamber of which he does not appear to have been able to procure the key. I was more fortunate, and the following note on the chamber to which the door gives access may be of interest to the subscribers of the Fund. The chamber, as will be seen from the plan (Fig. 2A), is irregular in shape;

the wall on the right-hand side on entering is masonry; the remaining sides, as well as the roof, are rock. It is evident that the chamber was formed, probably when the church was built, by cutting away a portion of the original tomb-chamber in such a manner as to leave a sort of cave, and the floor was lowered at the same time for a certain purpose explained below. I think M. Ganneau is quite right in supposing

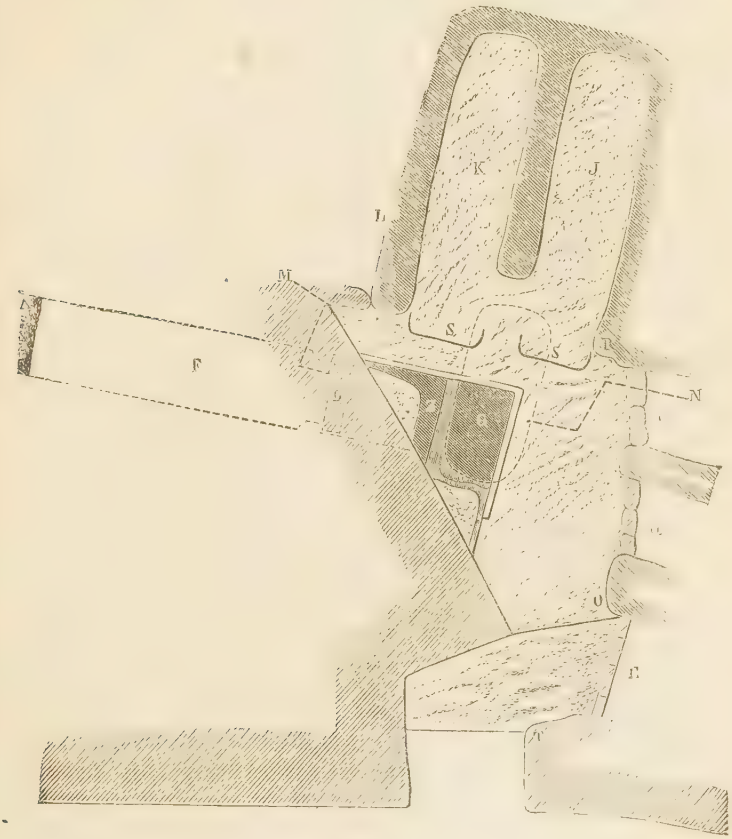


Fig. 2.

that the door, E, was originally a *kok*, though its shape is now rectangular; this *kok* has entirely disappeared, and so has that marked H, with the exception of the mouth and a small portion of the sides. The third *kok*, I, is of special interest; the right side and a portion of the roof have been cut away, but the bed has been left untouched, and the remaining portion of the roof forms a sort of rock-canopy over it.

The reason (Fig. 3A) for lowering the floor (*g f*) is now apparent; it was to convert the bed of the *kok* (*d e*) into a raised bench or altar, and I believe on certain occasions it is still used as an altar by the Syrian community to whom the chamber belongs. Fig. 3A shows also in elevation the openings of the *kokim* H, I, and of the door E, in the thin wall of rock which separates the chamber from the original tomb-chamber

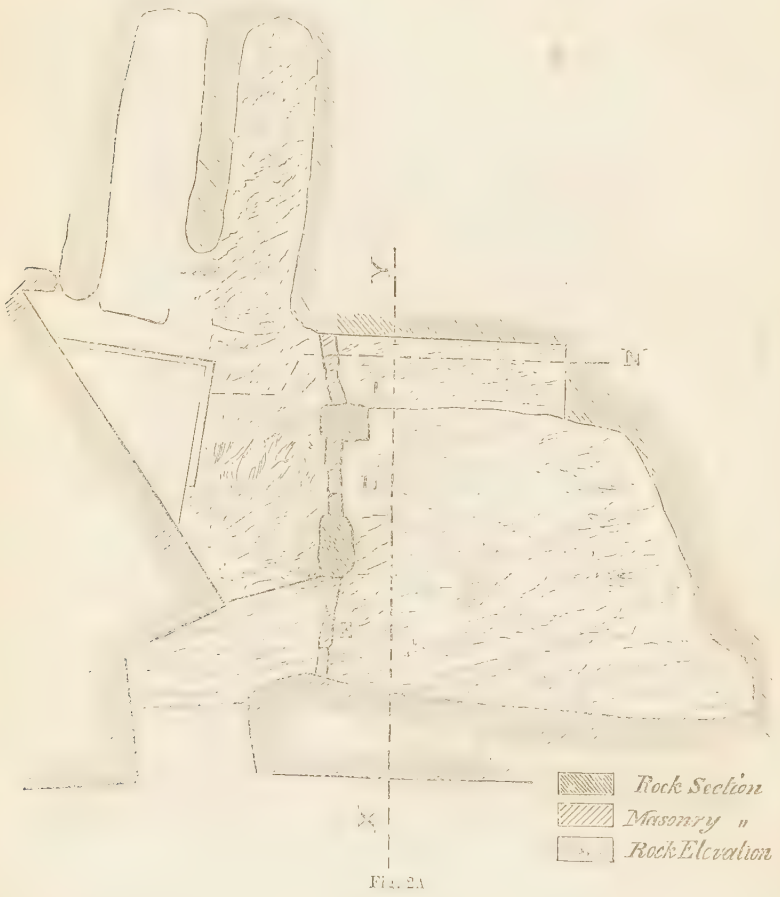


FIG. 3A

of "Joseph and Nicodemus." In my notes to the Ordnance Survey of Jerusalem, I alluded to the light which the *kok*, I, might possibly throw on the primitive form of the Holy Sepulchre. My impression is that if the Holy Sepulchre were originally a *kok*—and I see no reason why it should not have been—the mode of proceeding was somewhat

similar to that described above; that is to say, the floor of the original tomb-chamber was lowered, the side of the *kok* was cut away, and a canopy of rock left over its bed. As time went on and changes were made the *kok* would probably be entirely isolated, the canopy of rock disappear, and the tomb assume its present form. I have endeavoured

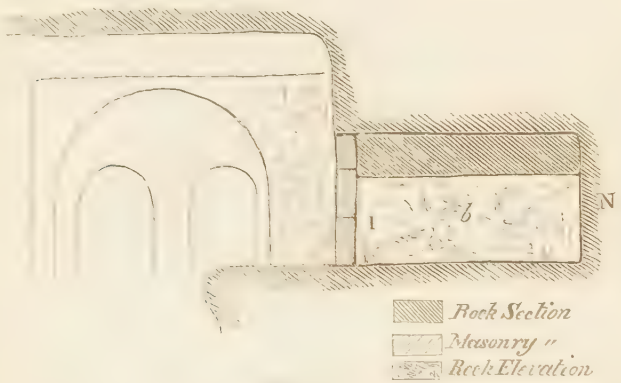
Fig. 3.

Fig. 3A.

to show this in the sketch (Fig. 4). Felix Fabri, 1480 A.D., mentions that pilgrims were in the habit of knocking off little pieces of the rock to carry away as relics, and it is possible that this may partially account for the disappearance of the roof of the *kok* (*e f*). Some of the earlier pilgrims mention a cave; this may be explained by reference to the little

Syrian chamber in which a roof of rock has been left, and the Holy Sepulchre may have undergone similar treatment.

M. Gaussen, in his opening paragraphs, alludes to the doubt which at one time existed as to the nature of the so-called tombs of Joseph and Nicodemus: I cannot understand how any one who had ever seen the rock-hewn tombs near Jerusalem could have any doubts on the subject. The chamber in which they are situated is unmistakably a Jewish tomb-chamber, and the tombs themselves are as clearly Jewish *kokim*. Whether this tomb-chamber was inside or outside the second wall is quite another question: I think myself it was inside, but the question is one which would require more space for argument than can be given at present.



a b. Present floor of chapel of Holy Sepulchre sunk below floor.
l c. Of the original tomb-chamber.
d. Bed of original *kok* now covered with marble slab.
e f. Roof of *kok* cut away at some period of alteration.
h k i. Rock cut away at some period of alteration.
g h. Masonry above level of rock.

There is no rock visible in the chapel of the Holy Sepulchre at the present day; it is entirely concealed by the marble casing.

C. W. W.

III.—Note by Lieut. Conder.

"And laid it in his own new tomb, which he had hewn out in the rock: and he rolled a great stone to the door of the sepulchre."—Matt. xxvii. 60.

It has long been pointed out that the stone closing the door of our Lord's tomb was not a mere shapeless mass of rock, but a carefully-constructed apparatus peculiar to Jewish tombs. There are one or two

points with regard to the rolling stone which I have not, however, seen noticed in any account of such tombs.

The rolling stone is not a very common method of securing the entrances of the rock-cut sepulchres, and it is natural to suppose, from the great advance in mechanical simplicity, that it is a late contrivance. The large majority of the rock-cut sepulchres, some 500 of which have been examined in the course of the survey, are not fitted with the groove necessary for the use of the stone. They are closed in some instances by a sort of portcullis of stone, but most frequently by a stone door on pivots fitting into holes bored above and below the entrance, and closed by a lock. The lock was probably of metal, since in every instance yet examined it has disappeared. The rolling stone generally measures about 3 feet diameter, and is 1 foot thick in some instances, resembling a cheese set on end. It rolls right or left of the doorway, which is some 2 feet wide, and it is kept up by a ledge of rock having a groove behind it, into which the stone is pushed back to open the tomb. The bottom of this groove is slightly sloping in some cases, so that the stone would roll down to close the door by its own weight. The weight, taking the specific gravity of the rock at 2·7, would be about 6 cwt. Thus not only is it entirely impossible to open the tomb from within, but it is difficult to do so from without; and a shock of earthquake would not, as has been lately suggested, cause the stone to roll back up hill, nor would it remain in that position unless scotched beneath.

The principal point to be noticed is that this kind of door seems to belong to the later Jewish tombs. This accords exactly with its use in the new tomb of Joseph of Arimathæa. The only dated example known is that of the tomb of Helena, Queen of Adiabene, mother of Izates, who was buried in Jerusalem in the first century (Ant. xx. 4. 3). In addition to this, it may be remarked that in the country north of Cæsarea, where there are many examples of this kind of door, the tombs are of the *loculus* description, and not *kokim* tombs. The same remark applies to the instance of a tomb near Endor, and in other cases the tombs contain both *loculi* and *kokim;* but we have collected no instance of a tomb with *kokim* only closed by a rolling stone. In a former paper I have shown reasons for supposing the *kokim* tombs to be the older form used by the Jews, the *loculi* to be the later form, also used by them. (See *Quarterly Statement*, Jan., 1876, p. 19.) In the Mishna (Baba Bathra vi. 8), a description of a tomb is given having *kokim*, but no account of a rolling door is added, and the form of antechamber prescribed precludes the possibility of such a method of closing the entrance, but the description applies exactly to the majority of the more ancient Jewish sepulchres.

The conclusion which may be drawn from the above notes seems to be that the Holy Sepulchre was in all probability a *loculus* tomb.

This deduction is in accordance with the description in the fourth Gospel (xx. 12)—"two angels in white sitting, the one at the head and the other at the feet where the body of Jesus had lain"—a dis-

position which is evidently impossible in the case of a tomb with a *koka*, which is, as has often been explained, a sort of pigeon-hole running in from the wall of the chamber some 5 to 7 feet in length, and 2 feet 6 inches to 2 feet broad, the feet of the corpse being at the nearer end, the head at the further. The *koka* was closed by a slab 2 feet broad, 2 to 3 feet high. The *loculus* tomb has a sort of sarcophagus under an arched roof, the body lying parallel to the wall of the chamber.

An argument for the identity of the present site has been drawn by De Vogüé and by M. Ganneau from the existence of an ancient *kôk* tomb in the church. This position has been considerably strengthened by the quotation of the Mishna furnished by Mr. Hepworth Dixon (Baba Bathra ii. 9), which runs as follows:—

"Corpses and sepulchres and tanneries are separated from the city fifty cubits."

Still there is evidence from the same sources to show that sepulchres dating from an early period existed within the walls of Jerusalem, and I may perhaps be allowed to collect these passages for the use of those interested in the argument.

Mishna Parah iii. 2: "The buildings (*Hazeroth*) of Jerusalem were founded on the rock, with caves beneath them, because of the *Kubr Hat Tahtum*" (or "Sepulchre of the Abyss").

The passage continues to explain that for the same reason the children sent to fetch water for the Red Heifer Sacrifice from Siloam were mounted on bulls, in order to have their feet off the ground, so as to escape pollution from the same source.

The explanation of the term "Sepulchre of the Abyss" is given by Maimonides, commenting on another passage (Nezir ix. 2), where he speaks of it as a hidden tomb, the depth of which was not known to any man. Thus it would appear from the Mishna that the Jews were aware of the existence of ancient tombs in and beneath the surface of the city.

The Tosiphtah gives us further information. It is a work of authority almost equal to that of the Mishnah, being attributed to Rabbi Hijah, about 120 A.D. Commenting on the same tract (Tosiphtah Baba Bathra, ch. i.), it states that all the sepulchres within Jerusalem were transferred outside the walls except those of the family of David and of the prophetess Huldah.

Another passage of the Tosiphtah is given by Neubauer (Edouyoth, ch. ii.): "Bones had once been found in a house of wood. The Rabbis wished therefore to declare the capital unclean, but Rabbi Jehoshua objected, saying, 'It would be shameful if we declare our houses unclean.'"

C. R. C.

AGE OF THE TEMPLE WALL.

II.—Pilasters of the West Haram Wall.

In investigating the rock-cut aqueduct which leads from the Twin Pools to the Haram wall just south of the great rock scarp at the north-west corner, I was able to penetrate into a chamber (see Fig. 1) whence the old wall is visible at a higher level than that at which it has been observed at any other point.

This discovery was briefly referred to in my report written after the visit which was made April, 1873, in company with Mr. Shick and a party of young Englishmen then in the city.

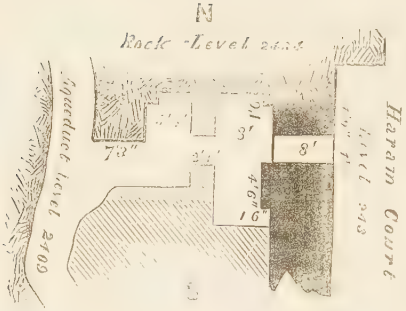
We passed along the passage which had been cleared out by Joseph Effendi on boards, and reached the end of the aqueduct at the point where the masonry had been previously described by Mr. Shick (*Quarterly Statement*, April, 1872, p. 50). The most interesting point with regard to the wall at this place is the fact that each course is set back about 6 inches, thus giving a batter to the wall. The care taken to preserve the effect on the eye produced by the sunk draft is remarkable. The set-back would naturally have the effect of making the horizontal drafts appear narrower than the vertical, which are flush, and for this reason the former are made 6 inches broad, the latter being only 3 inches; thus the total breadth of the surface on one plain is equalised.

The level of the rock at this point is 2409, 22 feet higher than the base of the great course, the highest left *in situ* along the greater part of the south wall. The height of the course visible is greater than the average given in Captain Warren's table, and less than that of the great course, being 4 feet 7 inches.

A batter was seen on the east wall by Captain Warren ("Recovery of Jerusalem," p 168) at a level 2370 and upwards. The set-back was here 4½ inches.

From the point where the aqueduct begins to turn round towards the Haram wall, a small passage leads due east beside the south face of the great corner scarp. We were thus able to ascend through the floor into a small chamber built against the Haram wall outside (see Fig. 2). A window in this chamber looks into the Court of the Haram, which has here the level 2431. We found the masonry of the wall to be similar to that beneath, and the window to be ancient. Still more interesting was the fact that the wall is here seen built with pilasters projecting just like those of the Haram at Hebron. The breadth of the pilaster is more than double that at Hebron, which is, I believe, 4 feet 0 inches, and the distance apart 5 feet, whereas the buttress here visible is 4 feet 0 inches broad, and the distance from the corner one 8 feet 9 inches. The projection is 1 foot 6 inches.*

* The rock buttresses found in Souterrain No. 29 north of the platform might also be compared; they are 3 feet 6 inches broad, and from 12 to 13 feet apart. Their projection is about 8 feet.



PLAN SCALE $\frac{1}{250}$

Fig. 1.

The north wall of the chamber is partly of rock, which here runs up in a scarp to the level 2434 ; in the north-east corner is a buttress of masonry 1 foot 6 inches broad. In the intervening space is the window with a flat lintel, the wall being 8 feet thick, the window 4 feet broad.

The projection of the pilasters is due to a bevelled set-back in the wall at the level of the sill of the window (2429). This measures 2 feet along the slope and 1 foot horizontally. The course immediately under the bevelled stones projects 6 inches, and is thus flush with the pilaster. This arrangement is similar to that of the tower at the north-east corner of the Haram. (See Plan and Sketch.)

This is, I believe, the only point where the masonry of the Haram has been observed at a higher level than that of the interior of the court, and it appears to show that the outer wall was originally decorated with pilasters. In his restoration of Herod's Temple, M. De Vogüé has so represented the wall.

It is probable that there would have been 70 of these buttresses along the south wall, but unfortunately the third buttress is south of the south wall of the chamber, so that the space between cannot be checked.

CLAUDE R. CONDER, Lieut. R.E.

NOTES FROM THE MEMOIR.

SINCE the publication of last *Quarterly Statement* the Memoir has been making very steady progress. Four sheets are now arranged, being respectively the Cæsarea sheet (7), the Bethshean sheet (9), the Gezer sheet (16), the Jericho sheet (18). The Jaffa sheet is also nearly ready (13). In addition, the translation of the nomenclature (6,000 names) is completed, and many valuable results have thus been obtained. Some 150 sites have been recovered (according to identifications proposed by me), which bear the names of Biblical towns, not to mention the numerous additions to our information as to Egyptian, Samaritan, early Christian, Talmudic, and Crusading sites furnished by the map.

The principal points of interest in the sheets as yet completed may thus be briefly summed up.

Sheet 7.—A full description of Roman and Crusading Cæsarea, the hippodrome, temple, theatre, harbour, the Crusading cathedral and walls, the two great aqueducts, an account of *Kefr Lam* (the Crusading Capernaum), and of various rock cemeteries along the shores.

Sheet 9.—The description of the Roman town of Scythopolis, its theatre and hippodrome, the Crusading citadel. Full account of the fortress of Belvoir, of the sites of Nain, Endor, Jezreel, and Shunem ; also the proposed sites of the well Harod, of Bethabara (*'Abâra*), and of Megiddo (*Mujedd'a*).

Sheet 16.—An account of Yebnah (Jabneel), its church and mosques, with their inscriptions, the probable site of Gath at *Tell es Sâfi*, and of

Gezer at *Tell Jezer*, with its inscriptions. Ekron, Ashdod, and a number of the towns of Judah.

Sheet 18.—This is one of unusual interest and importance. The question of the three sites of Jericho, the Roman town at the foot of the pass, the Crusading at *Erîha*, and the Jericho of Joshua at *'Ain es Sultân*, receives illustration. The early site of Gilgal recovered by the Survey Party, and the Crusading site found by Captain Warren, are discussed. The Mountain of the Scapegoat comes also into this sheet.

The numerous Crusading monasteries of the Jericho plains are described; the inscribed frescoes of the Quarantania chapels are shown by a careful comparison of the characters with those at Bethlehem to belong to the twelfth century. The mediæval "high mountain" of the Temptation, shown to be the *'Osh el Ghŭrâb*.

The most interesting points in the nomenclature are noticed in a separate paper. The latest identifications resulting from this study may be noted as follow:—

The Hittites.—Egyptian records show that the Chita, or Hittites, extended their dominion at one time to the borders of Egypt. It is possible therefore that the town *Hatteh*, in Philistia, may be named from them, as well as *Kefr Hatteh* in the centre of the country. *Hattin* has been previously fixed as the Kefr Hittai of the Talmud, another Hittite town.

The Avim.—This aboriginal people dwelt in "Hazeroth," or walled towns, as far as Gaza. It is therefore probable that *Beit Auwa* is named after them, as the word represents the Hebrew *Avi* closely. This ruin lies on the borders of Philistia, in a district where several Hazors occur in the Bible, and where remains of great flint walls surrounding the ruined towns are still standing.

The Cherethi appear to have been a division of the Philistines dwelling in the Maritime Plain, near the Negeb (1 Sam. xxx. 14). They appear in the same connection in Zephaniah ii. 5. The LXX. translate the word *Kreti*, whence has arisen the theory that the Philistines came from Crete. But, as far as their origin is known, this great people were Caphtorim, or *Kabtu*, as the word appears in the Egyptian records, a name connected with the modern *Kubt*, or Copt, and this agrees with the derivation of the Caphtorim from Mizraim or Egypt (Gen. x. 14).

A relic of the name of *Cherethi* exists, I would suggest, in the important village of *Keratîya*, spelt with the *Kaf* and *Te*, as in the Hebrew. It is situate in the very centre of the Philistine country, and at the edge of the Negeb, or "dry country."

In the town of Keratiya there is an ancient Crusading castle. To this the natives have given the name *Kŭl'at el Fenish*, or "Castle of the Fenish." The name of the *Fenish* lingers in the neighbourhood of Philistia at various points: at *Soba*, where the Fenish sultan had his palace in summer, his daughter dwelling at *Khŭrbet Ikbâla* below; at *Latrûn*, where were his winter quarters, near which is the "spinning mound of the Fenish sultan's daughter;" at *Beit Jibrîn*, where is the

"Cavern of the Fenish," and the "Garden of the Fenish." The tradition seems, as far as can be ascertained, localised to this part of Palestine. Hence one is led to conjecture that the peasants have made the usual change of L into N, and that the *Fenish* are really *Felish*, or Philistines. If this be the case, it is curious that we should find both the Cherethites and the Pelethites (who are supposed to be the Philistines under a slightly changed form of the word) leaving traces of their name in one village of Philistia.

Ataroth Adar.—This important point on the boundary of Benjamin is described (Josh. xviii. 13) as "near the hill that lieth on the south side of the nether Beth-horon." I have already noted that a village, *et Tireh*, here exists which may represent Ataroth. I now find there is also in the same neighbourhood a ruin called *ed Dâricli*, which is very possibly Adar.

Eder, one of the towns of Simeon, is very possibly *Khŭrbet 'Ader*, south of Gaza (Josh. xv. 21).

Gibbethon of Dan may perhaps be the ruin of *Geibâta* north of Jaffa.

Baalath of Dan has never been fixed in a thoroughly satisfactory manner. I would suggest *Bel'ain* as being in the same part of the country with the towns next on the list (Josh. xviii. 44).

Jabneel of Naphtali is not impossibly *B'aîneh*, an ancient site for which no identification has yet been offered. The loss of the final L is supposed.

Mount Heres was a district of Mount Ephraim in which lay Timnath Heres, where Joshua was buried. Its real signification seems to be "rugged mountain." Traces of the name perhaps may be recognised in *Bâtn Harâsheh* ("rough hilltop"), *Hâris*, *Kefr Hâris*, and perhaps *Khŭrbet Hirsha* (Charashim), all towards the west of Mount Ephraim.

Shalisha, a district seemingly west of the last in the Shephelah (1 Sam. ix. 4). Besides *Sirîsia*, which represents, as I have before shown, the Baal Shalisha of the Onomasticon, there are in this direction ruins called *Salita*, *Shilta*, and *Kefr Thilth*, which are all modifications of the Hebrew *Shalsh*, "three"

Meronoth, noticed 1 Chron. xxvii. 3, Neh. iii. 7, is probably the present *Khŭrbet Marrîna*.

Pirathon is a city noticed in the book of Judges (xii. 15) as "in the land of Ephraim in the Mount of the Amalekite." It is commonly supposed to be the modern *Fer'ata*, but this is a mediæval identification, and if the Samaritan Chronicle is to be received, the ancient name of *Fer'ata* was Ophrah. It would seem better to place this site at the important ancient site of *Fer'aûn*, supposing only the loss of the weak letter *Teth*. The name is known as early as 1322 A.D., being marked as Farona in an approximately correct position by Marino Sanuto on his map.

To pass on to sites not noticed in the Bible, but all of some interest.

Modin is noticed by Josephus (B. J. iii. 3. 1) as the western boundary

of Upper Galilee. This would seem to fix it at the modern *M'alia*, the Castrum Regium of the Teutonic knights.

Saab, a town in Galilee (B. J. iii.), native place of Eleasar son of Sameos, is no doubt the modern *Sh'ab*.

Caphrath, a town fortified by Josephus, in Galilee (see Rel. Pal. p. 684), is probably the modern Kefrah.

Asochis is the name of the great plain north of Nazareth. No trace of this title has as yet been discovered. The word in Greek is written Ασωχις (Vita 41 and 45), and this would be represented probably in Hebrew by the *Cheth*. The name of the mountain south of the eastern part of the plain is *Jebel es Sîh* ("mountain of running water"), having many fine springs on it.

One of the valleys running from this hill into the plain is called *Wâdy es Sîkh*. In these, perhaps, we may see traces of the required name.

Aphecos, a place mentioned in Samaria (B. J. ii. 19. 1) is perhaps the present *Kh. Ifkâs*.

Beth Rima.—The importance of the identification of this site with the modern *Beit Rîma* is great as giving another point near the boundary of Judæa and Samaria. It is noticed in the Mishnah (Menachoth ix. 7) and identified by Neubauer (Geog. Tal. p. 83). From it was brought wine of a secondary quality, but it must have been in Judæa, as no wine can have been allowed in Jerusalem if brought from Samaria. The wine of various Samaritan places was forbidden (*Tal. Jer.*, Abodah Zarah, v. 4), and even that from Regueb in Perœa was doubtful because it had to pass through part of the land of the Cuthim (*Tal. Jer.*, Hagigah, iii. 4).

The modern village is south of the great valley which seems to have been the boundary, and not far from *Brukîn*, which I propose to be Borceos (see *Quarterly Statement*, April, 1876, p. 67). It would perhaps be better to identify the Anuath of Josephus, "belonging to Borceos" (B. J. iii. 3. 5), with *Kefr 'Ain*, close to *Brukîn*, rather than with the Anuath of the Onomasticon. Thus we get the following towns on the boundaries all on the Jewish side.

Antipatris	Râs el 'Ain.
Borceos	Brûkîn, C.R.C.
Anuath	Kefr 'Ain, C.R.C.
Beth Rimah	Beit Rima.
Beth Laban	Lubben.
Shiloh	Seilun.
Corea	Kuriyut.
Keruthim	Kurâwa (?).

These would seem sufficient to determine the great valley of *Deir Ballût* as the boundary.

Hûsah is a place mentioned in the Talmud (*Tal. Jer.* Megillah i. 1) as identical with the Biblical Idalah of Zebulon (ed Dâlieh, C.R.C.), Josh. xix. 15. The position suggests that the place meant by the commentators is the ruin now called *Huwarah*, which is an ancient site near Bethlehem of Zebulon.

In the Byzantine and Crusading period several other places of interest may be noticed.

Beth Sur is noticed in the Onomasticon as a place one mile from Eleutheropolis. It is probably therefore the modern *Khurbet es Sûrah* in the required direction.

Megiddo.—It is interesting to know where the Crusaders supposed Megiddo to have been, as we can often trace our errors to their ignorance of the country. Marino Sanuto gives its modern name as Sububa. This is evidently the ruin called *Ibleâm*, south of el Lejjun, on the west side of the great plain.

Gihon.—Another curious instance of Crusading error is found in the mediæval identification of the Upper Gihon and Lower Gihon with the pools now called *Birket Mamilla* and *Birket es Sultân*. These identifications are countenanced by Robinson, but there is an important passage in the "La Citez de Gherusalem":—

"When one had passed over Zion one found a lake in the valley which was called Lac Germain, because the Germans caused it to be made to gather the waters which descended from the mountain when it rained."

This Lacus Germanicus is shown on the charts as the *Birket es Sultân*. The description given of the Lacus Patriarchæ, or *Birket Mamilla*, leads to the suspicion that this also was of the same date, but it is not positively stated to be of mediæval origin. The Crusaders placed a Mount Gihon on the hill south of this last lake. Robinson apparently accepts this identification, which is curious, since Reland had previously shown that Gihon was probably Siloam. The word means "springing forth," and is therefore only applicable to a fountain, none of which exist west of Jerusalem. In the Targums Siloam is put instead of Gihon, and there is no reason to doubt the identification. The question is of great interest, because it would follow that the great water channel from the *'Ain Umm ed Deraj* (en Rogel) to Siloam is the work of Hezekiah, and further light would be thrown on the locality of the City of David.

The Stone of Bohan is placed by Marino Sanuto on Olivet. This is of course a gross error, but it is interesting to observe that there are heaps of flints on Olivet, now called *Rujûm el Bahûmah*, and this word comes from the same root with *Ibhâm*, which is the Arabic equivalent of the Hebrew Bohan, or "thumb."

Shafat.—This name contains the radicals of the Hebrew Jehosaphat, and the natives of the place state it to have been named after a king of Jerusalem. A place of the name Jehosaphat is noticed near Jerusalem by Marino Sanuto, and Fetellus in his account of the city describes the Church of St. Stephen as between Jerusalem and Jehosaphat. This church was outside the Damascus gate, and it would seem that Fetellus means *Sh'afât* by Jehosaphat. The name of this town was perhaps altered by the Crusaders, or slightly modified from the word *Sh'af* (in the plural *Sh'afât*, spelt with *Te*), meaning a "mountain top," or any high place, like the Hebrew Nob.

Mountain of the Temptation.—It appears to have escaped notice that there was a second site shown in the middle ages as connected with the temptation of our Lord. Quarantania (*Jebel Kŭrŭntŭl*) has been shown, from the twelfth century downwards, as the site of our Lord's fast of forty days (Matt. iv.). Saewulf (1102), however, places the "high mountain" of the Temptation three miles from Jericho (which was then identified with the modern *Erîha*), in the direction of Galilee. Fetellus (1150) places Quarantania two miles from Jericho, and the "high mountain" two miles from Quarantania. John of Wirtzburg (1100 A.D.) gives the same measurements. The tradition afterwards underwent modification. Sir John Maundeville (1322 A.D.) knows of Quarantania only, nor does his contemporary Marino Sanuto mention the "high mountain." John Poloner (1422) speaks of Quarantania, and adds: "Others say that it is that high hill towards Galilee, distant two leagues from the aforesaid mountain, on whose summit was a chapel." This would be probably the site mentioned above.

Measuring on the plan it becomes clear that the place meant is no other than the remarkable conical peak of the *'Osh el 'Ghŭrab*. It is a curious instance of the ideas then entertained, that the summit of this "high mountain," whence the Crusaders believed our Lord to have seen "all the kingdoms of the earth," is about 300 feet below the surface of the Mediterranean.

The question has, however, a further interest. I have noted before that one of the valleys leading from the hill in question is called *Wâdy Mesâ'adet 'Aisa* ("Valley of the Ascent of Jesus"). The reason is now clear, for the origin, like that of the name Kŭrŭntŭl, is evidently Christian. This is then a case where the Bedawin have preserved a mediæval monkish tradition. Quarantania is another; the site shown to Captain Warren as Gilgal (*Tell Jiljû'*, or *Khŭrbet Mîfjîr*) is a third, for the place represents apparently the Crusading Gilgal. This throws considerable doubt on the origin of other traditions with regard to Biblical sites found among the Bedawin.

Tomb of Micah.—This was discovered, according to Sozomen (vii. 29, Hist. Eccles.), ten stadia from Kilah, at a place called Barath Satia, and was named in the native language Nephsa Neemana, or "Monument of the Faithful." In this very neighbourhood, west of Kilah, we found a sacred place dedicated to *Neby Naaman*, the name attaching now to a sacred tree near the ruin called *Khŭrbet Sherŭch*. In my paper on the Mukams I have pointed out this name, but was not then able to explain how Naaman occurs among the prophets. C. R. C.

NOTE.—Papers on "Archæology in Palestine," "On the Value of Josephus's Descriptions," and some further notes, are under consideration.

THE ASNERIE.

In the mediæval account of the Holy City, dating about 1187 A.D., known as "La Citez de Jherusalem," a building called the Asnerie, or "donkey," is described as outside the gate of St. Stephen, which is stated to be the northern gate (*Bâb 'Amûd el Ghûrâh*). The Church and Monastery of St. Stephen stood towards the right on entering, and the Asnerie, in front of it, to the left, or east of the northern road. The monastery was destroyed by the Christians before Saladin's siege, because it was near the walls and might be used in the attack, but the Asnerie was not destroyed and was afterwards in use.

The remains of this building were excavated by the owner of the ground in 1875, as mentioned in my report (*Quarterly Statement*, October, 1875, p. 190), but no full description has as yet been published of the discoveries. The following notes are taken from those made on the spot during our stay in Jerusalem in May, 1875.

Outside the Damascus Gate (*Bâb 'Amûd el Ghûrâh*) is the hill called *el Heidhemîyeh*, "the cutting," in which is the so-called Grotto of Jeremiah. A plot of ground at a lower level extends between this hill and the road, with a house in its south-east corner, as shown on the Ordnance Survey. On the north and west it is surrounded with a modern wall, and the garden is entered from the road in the north-west corner. The plot thus enclosed is about 150 feet square, with a scarp of rock on the north and east. It seems probable that the great inn called the Asnerie, originally belonging to the Hospitallers, occupied the whole of this site.

The scarp on the north was excavated in 1873 (see *Quarterly Statement*, October, 1873, p. 153) and traces of arches observed along it. A chamber is cut in the scarp, which was apparently a Christian double tomb, and this was found to be full of bones. The eastern half of the chamber measures 11 feet 7 inches by 7 feet 10 inches, and has three *loculi* 2 feet wide, one on either side, one at the east end. On the east wall are two crosses, rudely painted in red, with the Greek letters A and Ω either side of the cross. The other half of the chamber on the west measures 6 feet 2 inches east and west, 10 feet 8 inches north and south, and was full of bones. This tomb is entered by a double door on the south—the eastern 2 feet wide, the western about 4 feet.

Near the cistern marked on the Ordnance Survey, which appears to be very extensive and cut in rock, remains of piers of masonry were found, the stones about 2 to 3 feet long. On one of the stones a masons' mark, representing the letter R, occurs, showing the masonry to belong to the Crusading period. The stone has the diagonal dressing found on the best specimens of such date. A capital in marble, the base of a small attached column, and a pillar shaft 1 foot 6 inches thick, were also discovered.

About forty paces south of the garden gate the excavations laid bare the remains of a building—a wall of masonry similar to that above described running in two directions from its south-west corner, which

was laid bare. Northwards the wall extended 33 feet 6 inches, where it ends apparently at a gateway. A cross wall runs east 6 feet 6 inches south of the north end. Eastward the excavations were pushed for about 36 feet—both walls are 6 feet 6 inches thick.

Inside the southern wall are a row of what would appear to be stone mangers for the beasts here stabled. Each manger is 1 foot 9 inches broad, and they are separated by partitions 4 inches broad—about fifteen were uncovered. The back of the mangers slopes, so that at the top they are 2 feet 6 inches, measuring north and south, and at the bottom 1 foot 10 inches, the depth being 8 inches. Their discovery is of great interest as confirming the opinion which I ventured to express previously as to the identification of the building.

It is probable that the Church of Saint Stephen, built in the fifth century by the Empress Eudoxia, may still remain to be discovered beneath the rubbish on the west side of the road, where tombs were discovered in 1876, as reported by Dr. Chaplin (*Quarterly Statement*, January, 1876, p. 9).

C. R. C.

THE NOMENCLATURE OF THE SURVEY.

THE translation of 6,000 Arabic names on the Survey sheets has just been completed, and I propose to sum up some of the principal points of interest noticeable in this mass of nomenclature.

That the task of translation requires special acquaintance with the peculiarities of the peasant dialect may be easily shown. In the *Quarterly Statement*, July, 1872 (pp. 123, 150), Dr. Sandrezcki's provisional translation of the names collected by Captain Warren, and written down by the dragoman, is given. The true local meaning of the word is in a great many cases apparently unknown. A few instances will be sufficient to show how materially the translation may be improved.

Ku, rendered "retreat," or "window," is used by the Bedawin in its original Hebrew signification of a "hollow place." *Tabakah*, rendered "stage," or "story," or "floor," occurs constantly in the Jordan valley, meaning a "terrace" with precipitous edges. *Miseh* untranslated means the "mace tree" (*Cordia myxa*). *Matal es Sîreh* is best rendered "the ridge of the sheepfold," not "extension of the march." *Matkh* means a "height," not a "shepherd's staff," and *Rikbeh* is constantly used for a "hill-top" (properly *Rûkib*), not a "knee." *Jûrat el Beid* means "the white hollow," but is transformed by the dragoman into "ditch of eggs." *Hawârah* is the term used for a kind of soft white chalk, which fits better than the translation "a new-born camel." *'Ain el 'Abharah* means "spring of the mock orange" (*Styrax officinalis*), a plant which gives its name to a large wooded district near Carmel. This cannot but be considered an improvement

on "fountain of the fleshy damsel." In addition, *Bâtn* is a word often used in Palestine for a round hill-top, or "belly," as the word strictly originally means. *Hish* also is applied to a confused underwood, and should not be rendered "tumultuous assembly." Many other examples might be added.

The system according to which the Survey names were collected was as follows. A guide accompanied the surveyor and gave the name on the spot. It was repeated in camp in his presence, and written down by an Arabic scholar. Thus correctness of locality and of pronunciation was as far as possible secured. This nomenclature I have three times examined all through—once with a native scribe, once with the official lists and others furnished to us in the country, lastly with three Arabic Dictionaries, one Hebrew Lexicon (Gesenius), and one Aramaic (Buxtorf). Whenever the word was strange and new the meaning was as far as possible obtained from the guide, and a note made opposite. The late Mr. Drake had a very unusual acquaintance with the peasant dialect, and the Survey has the full benefit of his knowledge. In addition, the meaning of words is often rendered quite clear by the comparison of various instances of their occurrence in different parts of the country.

In addition to the various precautions to ensure accuracy described above, it must be understood that unusual or important names were not accepted on the testimony of one person, that every effort to check the veracity of the guides was used, incompetent guides dismissed, and spurious names cancelled. It is our hope, therefore, that what has been produced may prove to be accurate as well as sufficient.

Captain Warren* has stated that we have probably collected less than one half of the existing names, and this might lead to an impression that our work is imperfect in this respect. I would therefore call attention to the character of the native nomenclature, for it appears to me that the value of many names has been immensely overrated, from the fact that their origin and meaning have been entirely unknown. It is probable that the sheets might be thickly covered with such titles as the following given on one man's authority, or very probably impromptu inventions: *Shekhâkh et Tôr*, *'Alim el Hada*, *Maradd Hâni Abu Selheb*, *Hanût el Alein*, *Makarfet el Kattûm*, *Kurnet Sahsul Hameid*.

These titles actually occur on the Survey sheets, and might, as they stand untranslated, be considered of importance; they mean respectively, "the place where the bulls lie down" (beside a spring), "the directing sign-post," "the twisting zigzag—father of length" (a winding mountain ascent), "the public booth," "the place smelt by Kattûm" (an Arab having here fallen on his nose from his horse, as explained by the guide), "the peak of the fall of Hameid" (a Bedawi boy having fallen thence and broken his neck).

It is clear, probably, from the above that the map without a translation of the nomenclature will be a sealed book, that we should be in danger of falling into the error of the traveller who wrote down *Ma-*

* "Underground Jerusalem," p. 262.

bârûf ("I don't know") as the name of a village, and that in very many cases only the explanation obtained on the spot will account for a curious and unusual name.

The examination of the nomenclature shows that the answers given by guides and other natives were generally truthful. No attempt to work on our ignorance of the language appears to have succeeded, no evidently absurd names can be detected, and the fact that the most valuable names are those of ruins and villages gives reason to suppose that the various titles which might be added would prove of little value, being simply descriptive and modern: "brown mountain," "bubbling spring," or "heap of stones," being titles which obscure the map without any advantage.

With regard to the comparative value of names, two important points must be noticed: first, a great difference between the nomenclature of the peasantry and that of the Arabs; secondly, the antiquity of ruin names as compared with the later descriptive titles applied to natural features. On these points I have touched before, and there is nothing in them contrary to expectation; but it is important to remember the last, because if all important ruins are, as we hope, marked, and their names attached, then probably all that is of value in the nomenclature of the Survey has been collected. The number of names in the Bible relating to Western Palestine is under 600, and the collection of 7,000 modern names ought in all probability to ensure the recovery of all that can be recovered. Already all but about 100 are fixed with more or less accuracy, without including disputed sites or those within Upper Galilee, and the topography of Byzantine and Crusading Palestine can be worked out in even greater perfection from the Survey documents, as I hope the Memoir will clearly show.

Another interesting aspect of the nomenclature is the light which it throws on the language of the peasantry. I have already tabulated some of these results, but other points of interest have since come under notice which may be briefly enumerated.

The words used in the nomenclature may be divided into various classes: first, those exclusively of Hebrew or Aramaic origin not used in modern Arabic; secondly, words common to Aramaic and Arabic; thirdly, foreign words. The question of the change of words from their original form is part of the same subject.

In the common vulgarisms of the peasant dialect valuable indications may be detected. Thus the confusion of the gutturals and the hardening of the *Aleph* into the gutteral *'Ain*, which were a reproach against the Galileans in the older times of the Talmudic writers, are still remarkable among the peasantry. The placing of an *Aleph* at the beginning of a word, as *Abzîk* for *Bezîk*, *Ajdûr* for *Jedûr*, and the introduction of *Aleph* and *Wow* in various words giving a broader and longer sounds, are peculiarities noticeable in Aramaic nomenclature when compared with Hebrew, and also in the peasant dialect. In addition to this, various letters are pronounced in a manner which agrees with their

proper relation to Hebrew. *Dhâl*, the Hebrew *Zain*, is pronounced like Z. *Tha*, the equivalent of *Sin*, like the Hebrew *Sin*. The N and L are confused constantly, as also in Aramaic. The pronunciation of the Bedawin differs from that of the peasantry in many letters, and the pronunciation of townspeople is again different. The words used by the Arabs are again local, and not used by the peasantry in many cases. Thus in the Jordan Valley *Tuweil* is the title employed for the long knife ridges, and is derived from the root "*Tûl*," to be long. *Suwâl* is used for a cave; *Hurubbet* for a cistern; *Râz* for a shepherd. The peasantry commonly use the words *Sh'ab*, *Mughârah*, *Birkeh*, and *R'ai* instead, these being Hebrew words, and the Bedawin words more strictly Arabic.

The laws of relation between Hebrew and Arabic letters are well known. Though the sound may differ as in *Abeâl*, the Arabic of the Hebrew *Abez*, "white," still, in my opinion, no change can properly be said to have taken place where the Arabic is the proper equivalent of the Hebrew or Aramaic. It is commonly said that the original nomenclature has been much altered, in order to give a significance in modern dialect to ancient words. The examination of the nomenclature does not, however, bear this out so fully as may have been expected. It seems that the word has often remained quite unchanged where the meaning has been lost, or that the peasantry attach a more archaic meaning to the word than we suppose; but scarcely one substantiated case has been found, as far as I am aware, of any very considerable "introversion" or radical change of a name, *except in cases where the name is of foreign origin.*

Many words commonly used have meanings in Hebrew or Aramaic which apply well, but have no topographical significance in Arabic.

Thus *Shu'al* is a word applied in several cases to caverns, and has the significance of the Hebrew root, "to be hollow." In Arabic it would mean "a firebrand." *Fukhteh* is used to mean "a quarry" or "cutting," as in Hebrew. In Arabic it means "a pigeon." *'Aun* is used as in Aramaic to mean "a flock," in Arabic it means "a she ass." Many instances of this archaic condition of the language might be adduced, and, as I have previously noticed, the common words such as *'Ain*, *Khurbeh*, *Tell*, &c., &c., are all Hebrew words unchanged in the modern nomenclature. These form a very large proportion of the whole.

The translation of the nomenclature also furnishes us with various identifications which might otherwise be lost; thus *'Ain el Jem'ain* means apparently "spring of two troops," and its position suggests it to be the well Harod, where Gideon divided the men who lapped from the rest. *Wâdy Mes'adet 'Aisa* means "valley of the ascension of Jesus," and applies to a point where mediæval tradition supposes our Lord to have been carried to a lofty mountain-top by the tempter. *El Mahrakah* means "place of burning;" were this unknown we should have no indication of the possible site of Elijah's sacrifice.

To pass on to the more modern or strictly Arabic nomenclature. This

as before observed, belongs principally to the nomadic people. The old names are forgotten, and modern descriptive titles substituted; in addition to this, modern events, such as the slaughter of an Arab by Government, the destruction of a camp by a flood, the fall of an Arab boy from a cliff, result in well-known titles of formidable appearance, but of no value for purposes of Biblical research. The majority of the Jordan Valley names belong to this kind, and the deserts of Judah and Beersheba repeat the same class of titles. The Bedawin have in addition to their peculiar dialect a sort of slang, which we found ourselves quite unable to understand, the words being all new to us. This they use apparently to prevent the peasantry or Government officials from understanding their conversation. When in communication with them or with us they used a corrupt Arabic, with various peculiarities of pronunciation.

The stock of the language is apparently Aramaic, as it was in the fourth century, and this gives a clear explanation of the preservation of the ancient nomenclature. Various foreign words have, however, crept into use. Thus *Bordugan* is the Italian *Portugallo*, an orange. *Burj* is equivalent to Burg, or πυργος, "a tower." There are also indications of the earlier importation of foreign words. To the Greeks the nomenclature owes no doubt *Terkûmieh* for Tricomias; *Fendekûmieh*, Pentecomias; *Burjmus*, Pergamos; *Beidus*, Pedeios. To the Romans, *Koloniyeh* for Colonia, *Kŭstŭl* for Castellum, and many others. To the Crusades, finally, many titles are to be traced—*Sinjil* for St. Gilles, *Bardawîl* for Baldwin, *Dustrey* for District, are instances.

It is in these foreign words that change and corruption is, as might naturally be expected, most clearly to be traced. The classical titles of Scythopolis, Eleutheropolis, and Sycaminos have disappeared entirely, unless a trace exists in the words *Shŭk*, "thorn;" *el 'Atr*, "scent;" *Semak*, "fish;" applied to ruins close to their sites. With regard to the latter, it is curious to observe that the Talmudic writers found just as great difficulty with the name Sycaminos, which became in their hands *Shikmônah*. One may remark in the Talmud the clumsy attempts to transliterate Greek or Latin words, giving evidence of the difficulty with which the natives of Palestine adapt their tongues to an Aryan language. The native nomenclature does indeed give instances of change, as in *Shefa 'Amr* for the Talmudic Shafram, the modern name meaning "healing of Omar," and connected with a tradition; but such instances are few compared with the almost universal corruption of the foreign words.

Thus translated the nomenclature becomes, I think, of value, the ground is cleared, the origin of various names explained, and the really ancient and valuable titles distinguished from the surrounding cloud of modern and unimportant names.

CLAUDE R. CONDER, Lieut. R.E.

SYCHAR AND SYCHEM.

In the new illustrated edition of Dr. Farrar's "Life of Christ," part 6, p. 164, a view of Nablus is given with the title Sychar beneath it. There are, however, good arguments, it would seem to me, in favour of the view that the Sychar of the fourth gospel (iv. 5) is a place distinct from the ancient Shechem.

The reason for supposing identity between the two sites appears to be Robinson's assumption that Sychar ("drunkard") was a Jewish corruption of Sychem, in contempt of the Samaritans.

By Jerome the two are considered as distinct places. Thus in the Onomasticon (s.v. Sichar) Jerome and Eusebius agree in placing this town "before" (*i.e.*, east of) Shechem, and the Bordeaux pilgrim (Itin. Hierosol) places Sechar one mile from Sechim by Jacob's Well.

In his time the ancient site of Shechem was supposed not to be actually at Neapolis (Nablus), but at ruins farther east nearer to Joseph's tomb, which accounts for the distance given by the Bordeaux pilgrim.

In Crusading times, however, the distinction between Shechem and Sychar was not observed, thus Jaques de Vitry identifies Neapolis with Sychar (Gesta Dei, p. 1078).

It is important in this connection to mention another name connected with this spot. In the Onomasticon we have the name Balanus, "id est quercus Sicimorum" (Judges ix. 6), as close to Joseph's tomb. Of this title we have a trace in the modern *Balâta*, which may probably be connected with *Ballût*, "an oak" in Arabic. This place is mentioned in the Samaritan book of Joshua, and is perhaps the Elonah Tabah or *Shejr el Kheir* (*i.e.*, "Holy Oak") of the Samaritan Chronicle. (See the paper on Samaritan Topography.)*

It would appear that Sychar was in Jerome's time separated from Shechem, having near it another village, *Balata*, supposed to represent the "oak of the pillar that was in Shechem" (a.v., *plain*).

The reason why Robinson failed to identify Sychar with the village of *'Askar*, just above Jacob's Well on the side of Ebal, seems to be that he did not know the name, which does not appear in his lists or in his account of Nablus. The identification has been supported by Canon Williams and Dr. Thomson, and the main difficulty appears to lie in the existence of the guttural *'Ain* in the name.

A comparison with the Samaritan Chronicle is of interest as removing the philological difficulty (see *Quarterly Statement*, October, 1876, p. 197), for in the list of places inhabited by the high priests after Tobiah we

* In spite of the fact that the Greek reads *Βαλανος*, and the Latin Balanus in the Onomasticon, it is probable that the word intended is the Aramaic בלוט, an oak, equivalent to the Hebrew אלון. The radicals in the Aramaic word are the same as in the Arabic *Balâta*, though the word in Arabic means "pavement."

The same place is probably intended by the "Terebinthus in Sicimis," where Jacob hid the idols (Gen. xxxv. 4), "juxta Neapolim" (Onomasticon).

find both Shechem and Iskar (סכר). If this latter be the Sychar of the gospel it is possible that it has no connection wfth the Hebrew word for "drunkard," but comes from a Hebrew and Aramaic root meaning "to be shut up." Sikra (סיכרא) is noticed in the Talmud as the name of a place (Baba Metzia 42a, 83a), and En Sukar (עין סוכר), is also noticed in the Mishna, Menachoth vi. 2. The Samaritan Chronicle dates back to 1150 A.D.; the Arabic translation gives *'Askar* as a rendering of the Samaritan Iskar, and as by comparison of other towns we find the Arabic evidently to intend the same place with the original, we see that the Samaritans themselves identify the modern *'Askar* with an ancient Ischar or Sichar. The Arabic word means "a collection" (hence an army).

In writing on this subject (see Smith's Bible Dictionary, art. Sychar) Mr. Grove has remarked how much more naturally the narrative in the gospel would apply to a comparatively obscure site than to the very capital of Samaria itself.

"Then cometh he to a city of Samaria (*εἰς πόλιν τῆς Σαμαρείας*), which is called Sychar, near to the parcel of ground that Jacob gave to his son Joseph.

"Now, Jacob's well was there. . . ." (John iv. 5, 6.)

This description is most accurately applicable to *'Askar*. The well of Jacob is situate at the point where the narrow vale of Shechem begins to broaden into the great plain of the Mukhnah (or Camp). It is about 2,000 yards east of the town of Nablus, which lies hidden from it. Immediately west lies the little village of *Balâta* with its fine spring and gardens. Little more than a third of a mile north-east is the tomb of Joseph, and from this a path gradually ascending leads to the village of *'Askar*, which is visible from Jacob's Well. It is merely a modern mud village with no great indications of antiquity, but there are remains of ancient tombs near the road beneath it.

As regards the position of Shechem, it may be noticed that the ancient cemetery occupies the side of Mount Ebal above the modern one, and extends thence westward, being separated by about 1½ miles from the site of *'Askar*.

In confusing Shechem and Sychar Robinson has, as in other cases, followed that very monkish tradition of the middle ages which he so strongly condemns in other instances. C. R. C.

THE AMERICAN EXPLORERS IN PALESTINE.

(Reprinted from the *Athenæum*, by permission of the Proprietors.)

BEIRUT, SYRIA, *May* 10, 1877.

THE better acquainted I become with the country east of the Jordan, the more I am amazed at its fertility and natural resources. The scenery everywhere among the Gilead hills is picturesque and beautiful. The forests and cultivated fields, the green valleys and grassy slopes, remind one of the park scenery in England. The hills in many parts

are well wooded, but besides this there are also dense forests of large fine old trees, such as are not elsewhere seen in this peeled and poverty-stricken land. The upper portion of Wâdy Yâbis is called "el Akhdar" —*i.e.*, the green, and its gardens and orchards, as well as its fields of grass, combine to render it a charming place. But Wâdy Ajlun surpasses the Yâbis in respect to cultivation and beauty, because it is larger, and the fountains which feed its copious stream are at a much higher level in the mountains. Ain Jenmeh is near the head of this wady, and the fountains and streams flowing among the olive trees and walnut groves there make this one of the most delightful valleys in Syria. There are three other flourishing villages, Ajlun, Anjara, and Keferenji, all except the latter in the immediate neighbourhood of Ain Jenmeh, and the valley at that point is full of ancient ruins, which extend clear up to Kallat er Rabad itself, showing that this locality has been occupied by towns or cities from remote times.

At one place on this wady I saw an orchard of unusual extent, in which there were at least eight kinds of fruit trees—the fig, olive, apricot, quince, plum, lemon, apple, and the pomegranate growing side by side. The valley is full of mills, flour-mills, of which I counted about twenty, but not all of them were in working order; and not only on this but on many other streams as well the number of ruined mills surprises one. For instance, on the line of the Zerka, or Jabbok, I counted between twenty and thirty ruined flour-mills, besides a very few that were in operation. I learn that in some cases the locality chosen for the site is not a good one, and the investment proves a failure; and in the more dangerous sections, as has doubtless been the case on the Zerka, the people have been either driven away or murdered, consequently the place and the business have been abandoned.

As yet I have only referred to the region of Jebel Ajlun, or the mountains of Gilead. But the great plateau which stretches eastward from the lake of Tiberias to the Lejah, and south to Dra (Edrei) and Gerash, is one vast natural wheat field. Some portions of this plateau are rocky, but these furnish excellent pasture; the soil, however, is for the most part tolerably free from stones, and the ploughman has no excuse for turning a crooked furrow. Those who are familiar only with the country west of the Jordan will perhaps hardly believe me when I state that on the Hauran plains I have seen in the ploughed fields furrows a mile and a mile and a half in continuous length, and as straight as one could draw a line.

The region south of Bozrah, towards Um el Jemal, and south-east of Dra, and east of Gerash, is full of ruined towns, and the soil is fertile and once supported a large population. For generations, however, this section has not been occupied, because life and property have been so insecure. But within a year or two past a good many families have gone in there and occupied some of the ruined towns, and are attempting to cultivate the land. They will succeed if they are not interfered with; but they are exposed to danger, and it is to be feared that the

Ancizeh Arabs are not yet sufficiently civilised to overcome their instincts for plunder. The people of El Hosn and of Dra informed us, however, that thus far these settlers had not been molested. The Hauran wheat is considered one of the very best kinds in Syria, and if the government would encourage the farmer, instead of oppressing and robbing him, this section would become a source of wealth to the country. It is difficult to exaggerate the extent and beauty of the vast plain about Fik, and along Wâdy 'Allan, and at Nawa, and those which stretch southward to Tel Ashtara, Mazarib, and Dra. This would be a paradise for the wheat-grower, if he could only be protected in his rights.

In searching for Biblical sites, I have followed up the whole line of the Zerka from its mouth to its source, and I find the valley pretty extensively cultivated. It being sixty-five or seventy miles in length its capacities are great, because the supply of water is abundant, and every acre could be reached by irrigating canals. There are already a multitude of farms in this valley, and the wheat-crop this year is good. With regard to the canals just referred to, the present cultivators of the land say that they dig no new ones, and the Arabs say that those which exist now have always existed there. There are on the hill-sides many unused canals, a few of which can be traced to a distance of five or ten miles. These remains show that in ancient times there was a perfect system of irrigation, by which not only the bottom land was brought under cultivation, but in some cases even the foot hills themselves. When the present farmers want to utilise a new piece of ground, all they have to do is to clear out and repair one of these old canals. Some of these canals exhibit such skilful engineering that I often wondered how the people of to-day, whether Arabs or fellahîn, could have built them, until they assured me repeatedly that neither they nor their fathers had anything to do with their construction. They must have been built originally at great expense, for they lead under ledges, and around bold rocky cliffs, where only skilled workmen could carry them, and in one case the canal was carried along far up on the hill-side, keeping its level, and following the irregularities of the mountain to a great distance. The farmers generally combine and share the expense of keeping a certain canal in order, and then each will have specified days when he can use the water for himself.

I have in former letters mentioned the fact that the Jordan valley between the Zerka and Nimrin was quite barren, because there are no streams or fountains in the hills to water it; while north of the Zerka, where streams are numerous, the valley is clothed with wheat-fields and vegetation. Just south of the Zerka there are some traces of ancient canals, showing that a portion of the valley between the Zerka and the road leading from Nablûs to Es Salt was formerly under cultivation, although it is now a desert; excepting, of course, during the winter rains. Perhaps more than half of the Jordan valley (I speak always of the valley east of the river) is now reached by irrigating canals; and in

those sections not occupied by wheat-fields the thistles and weeds are rank, and grow as high as a horse's back, and often as high as the shoulders of a man on horseback, and form such dense jungles that it is almost impossible for a horse to make his way through them. I have examined the Jordan valley throughout its whole extent, with special reference to its being irrigated from the Jordan itself; and I am convinced that the project is very feasible. Every square mile not now irrigated could be watered from the Jordan, and the expense for a dam and canals would be small compared with the large number of square miles of valuable land that would thus be made productive. If we reckon the valley at sixty miles in length, and from two or three to six miles in width, we shall have 180 square miles of land as fertile as any prairie, and which, at twenty or twenty-five bushels per acre, would produce between 2,000,000 and 3,000,000 bushels of wheat. If it is objected that people could not live in the valley, the answer is, that the people who cultivate the soil there at present live there all the year round, and besides, the ruins of a dozen important towns along the line of the foot-hills show that the valley has been inhabited by civilised people at some time in the past. These remarks with regard to irrigation apply with equal force to the vast plains of Cœle-Syria, along the Leontes, and those of Hums and Hamma and others along the Orontes to the north. Give these plains and deserts water, and you can transform them into gardens.

If we go south of the Zerka we find the Jazer region, which the children of Reuben and the children of Gad once coveted as a fine pasture-ground for their cattle (Numb. xxxii.), still abounding in wheat fields and covered with numerous flocks and herds of the Bedouin. At Khurbet Sar there is a large plateau extending north and east a distance of three miles perhaps, and in this plateau is the watershed between the Zerka on the east, and wadys Keferein and Hesbân on the west and south. The region is studded with ruins, and among them I think I am able to identify some of the cities of the tribe of Gad.

In these notes I can only refer to the Belka or plains of Moab, which equal in fertility the most favoured sections of the country elsewhere, and which, when covered with wheat-fields and herds of cattle, as they are about the 1st of May, is not surpassed in beauty by any plain in England or America.

The wheat-fields at the mouth of wadys Keferein and Hesbân, as well as those in the upper Jordan valley between the Zerka and the Lake of Tiberias, are as fine as any in the world. In the former locality, *i.e.* on the Shittim plain, the harvest began about the middle of April, and farther north about the 1st of May.

Some of the tribes in the Jordan valley, north of the Zerka, cultivate their own land. But the more aristocratic Bedouin, like the Adwan, the Beni Sakhr, and the Beni Hassan, employ fellahîn entirely. Along the upper Zerka, in the Jaazer region, in the fertile sections of the Shittim plain, and elsewhere, fellahîn do all the work. Large numbers of Chris-

tians go out from Es Salt to the Zerka every year for the purpose of cultivating the land on shares. The peasant or farmer is given, at the beginning of the season, four or five or six dollars, as the case may be, and a pair of shoes at the outset. He also has seed furnished him; besides this he receives nothing. He must do all the work, from ploughing to threshing, furnish cattle and tools and men, and his own food; and at the end he receives one-fourth of the crop. I went one bright moonlight night to visit the theatre at Ammân, which, by actual measurement, I had found would seat upwards of 10,000 people; and in one of the corridors I aroused a man, who proved to be a "Saltee," as they are called, a Christian peasant from Es Salt, who was cultivating land for the Arabs, and who found here at night a temporary shelter for himself and his cattle.

A poor ignorant Christian cultivating land for a degraded and wretched Bedouin, the present nominal owner of the soil, and making his home in the ruins of a theatre that was once brilliant with ten thousand eager spectators gathered together from a city of churches and palaces and temples—the people of intelligence and wealth all gone, the people and buildings that remain sunk down into moral and physical ruin—is in human judgment a strange reversal of the law of progress, which gives rise to serious and painful reflections.

SELAH MERRILL.

DEIR EBAN, THE GREAT EBEN, AND EBEN HA-EZER.

(Reprinted from the *Academy*, by permission of the Editor.)

PARIS, *October* 20, 1876.

IN my last, very brief, report (Palestine Exploration Fund, *Quarterly Statement*, No. XIII., October, 1874, p. 279), I formally proposed the identification of *Deir Ebân* with the great *Eben* on which the ark was placed on its arrival at Ekron. I had long before arrived at this result; I have repeatedly spoken of it to several persons, especially Messrs. Drake and Conder, reserving to myself the right of dealing with the question in detail, and particularly the relation of the great *Eben* to *Eben ha-ezer*. Mr. C. R. Conder having in one of the recent *Statements* of the Palestine Exploration Fund (July, 1876, p. 49) proposed afresh to recognise in *Deir Ebân* the Hebrew word *Eben* (stone), and to locate Eben ha-ezer there, I am happy to see him partially adopt my theory, and I think I ought to seize this opportunity to set forth briefly the conclusions at which I long ago arrived on this subject.

(1) *The Great Eben.*—The Philistines, bringing back the ark on a waggon from Ekron to Beth-Shemesh, reach the verge of that city, now represented by Ain Shems (1 Sam. vi. 12); the waggon stops in the field of Joshua the Beth-Shemeshite, where there was a great stone (Eben); the ark is rested on the "great stone," a sacrifice is offered in this place,

and the cows which were drawing the ark are sacrificed (v. 14-15). A little further on (v. 18), in speaking of the gold offering, the narrator returns to this "great stone"* on which the ark was rested, and which is pointed out to this day in the field of Joshua: it seems this time to indicate clearly the limit of the Philistine territory (to the great stone . . .), which, moreover, is confirmed by the fact that the Philistines go no farther, and that, after accompanying the ark to this point, they return to Ekron. The memory of this event is, if my opinion is correct, preserved in the name of *Deir Ebân;* as to the extraordinary importance assigned it by the book of Samuel, this is explained by the following considerations:†

(2) *Eben ha-ezer.*—The Israelites on their way to attack the Philistines, who had advanced to Aphek, encamp—probably on the confines of their territory—near the stone of succour (Eben ha-ezer). Beaten the first time, they bring up the ark of Shiloh, and again try the fortunes of battle; they are completely defeated, and the ark, which falls into the hands of the Philistines, is transported by them from Eben-ezer to Ashdod. These events occur, be it understood, *before* those which we have just related.

Is it not natural that later on the ark should have been carried back to the same point where it had been captured? On the very same spot where the sacrilege had been committed should the expiation be made. Now this spot bears precisely, as we have seen above, the name of "the great stone" (*Eben*).

There is yet another argument. It is only farther on (chapter vii.) that the narrator tells us the origin of the name of Eben ha-ezer, whence it results that, at the moment of the return of the ark, the place did not yet bear this name of *Eben ha-ezer*, and that the narrator only used it by anticipation when speaking of the defeat of the Israelites: as the religious outrage inflicted on the ark had been repaired on the very same spot where it had taken place, so the national outrage was to be atoned for under identical conditions. It was at Eben ha-ezer itself that the Israelites, beaten at Eben ha-ezer, were to take, under the leadership of Samuel, a signal revenge. It was then only that the

* *Abel* must be corrected into *eben* in the opinion of all the commentators.

† Between Deir Ebân and Ain Shems is a rocky spot called Tantura, and perhaps also *Es-sâ fyé.* This was the scene in ancient times, according to the legend, of a great massacre of fellahs by the soldiers of the Government (*sic*). Since that time *dhabat tantûra* has been a proverbial expression for a great massacre. It should be noted that the word *dhabha* (slaying) is precisely the Hebrew *zebah* (sacrifice). In the middle of the valley between Sar'a, Artouf, Ain Shems, and Deir Ebân, there is also a low flat-topped hillock, covered with small stones, called *Khirbet er-Roudjoûm;* there was there a *qal'a* like a church (*sic*). The old name of *Deir Ebân*, according to the fellahs, is *Zeid el-mâl.* This word mâl (silver, money) is added to many names of places as a kind of epithet; thus we have, between Ramleh and Jaffa, *Sarsenâ el-mâl* (in allusion to *Sarf el-mâl*, money-changing) = zeid el-mâl, meaning "increase of silver."

battle-field, determined by the position of Maspha, Bethkar, Sen (and Aphek), was consecrated by the *erection of a stone* to which Samuel gave the name of *Eben ha-ezer*, "stone of succour."* It marked the point reached by the pursuit, and the Philistines never again crossed *the borders* of Israel.

It results, therefore, from these comparisons, which I can now only briefly indicate, waiving certain obscure points :—

(1) The place where the Israelites were beaten and where they lost the ark did not assume till a later date the name of *Eben ha-ezer*.

(2) It is to this same spot, this time called *Eben*, that the Philistines carried back the ark.

(3) The Israelites having beaten the Philistines in their turn at this same place called it Eben ha-ezer.

(4) This place must have been on the confines of the Philistines and the Israelites—may, perhaps, even have been one of the boundary-marks.

(5) All these data, including that of the *Onomasticon*, apply remarkably well to Deir Ebân.†

CH. CLERMONT-GANNEAU.

* It results from a passage in Josephus that the stone must have borne in certain Hebrew MSS. the name of *Azaz* (strength, strong), with a final *zain* instead of a *resch*, for he translates this name by ἰσχυρόν, strong.

† The track of the *waggon* carrying the ark from Ekron to Deir Ebân must have been by the present Wady Sarar, which is certainly the Valley of Sorek, as I conclusively proved by the discovery of *Khirbet Sourîq*, in 1874.